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Annual Index – 1980

Subject Index 00 — 58

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1980 Mathematics Subject Classification

(As used in Mathematical Reviews beginning in 1980)

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Budapest *See* Conference: Algebra, 80b:00003
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Functional analysis *See* **Constructive theory of functions and functional analysis, 80d:00006; Methods of functional analysis in problems of mathematical physics, 80d:00014; Studies in functional analysis and differential equations, 80d:00020** *and* **Topics in functional analysis, 80d:00023**

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Studies in analysis ★Studies in analysis. **80f:00006**

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Workshop:
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Secondary classifications:

(Calogero, F.) *See* **Nonlinear evolution equations solvable by the spectral transform, (80a:35003)**
(Fourman, Michael P.) *See* **Applications of sheaves, (80j:18001)**
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(de la Penha, Guilherme) *See* **Contemporary developments in continuum mechanics and partial differential equations, (80a:73003)**
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(Vladimirov, V. S.) *See* **Conference: Mathematical Problems of Quantum Field Theory and Quantum Statistics, (80m:81005b)**
Applications of sheaves ★Applications of sheaves. **(80j:18001)**
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Durham *See* **Applications of sheaves, (80j:18001)**
Fields and particles *See* **Conference: Mathematical Problems of Quantum Field Theory and Quantum Statistics, (80m:81005b)**
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Microprocessors ★Short microprocessor dictionary. **80j:00011**
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Zagustin, Elena A. *See* **Kalaba, Robert E., (80a:73048)**

(Zubarev, D. N.) *See* **Balescu, Radu, (80a:82002)**

00A99 Miscellaneous topics

Secondary classifications:

Kuznecov, B. G. Newton—Voltaire—Rousseau. (Russian) **(80d:01012)**

(Newton, Isaac) *See* **Kuznecov, B. G., (80d:01012)**

(Rousseau, Jean-Jacques) *See* **Kuznecov, B. G., (80d:01012)**

(Voltaire) *See* **Kuznecov, B. G., (80d:01012)**

01-XX HISTORY AND BIOGRAPHY [See also the classification number -03 in the other sections.]

01-01 Elementary exposition, textbooks

01-02 Advanced exposition (research surveys, monographs, etc.)

01-06 Proceedings, conferences, etc.

(Avogadro, Amedeo) *See* **Proceedings: Commemorative Meeting for the Second Centennial of the Birth of Carl Friedrich Gauss and the 150th Anniversary of the Death of Pierre Simon Laplace, 80j:01001**
(Baĭmakova, I. G.) *See* **History and methodology of the natural sciences, 80d:01002**
(Bazarov, I. P.) *See* **History and methodology of the natural sciences, 80d:01001**
(Bogoljubov, O. M.) *See* **Mechanics and physics in the second half of the 18th century, 80d:01003**
(Eckart, Wolfgang) *See* **Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss, 80i:01001**
(Gauss, Carl Friedrich) *See* **Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss, 80i:01001; Proceedings: Commemorative Meeting for the Second Centennial of the Birth of Carl Friedrich Gauss and the 150th Anniversary of the Death of Pierre Simon Laplace, 80j:01001** *and* **Festschrift: Gauss, Carl Friedrich, 80k:01001**
(Gordeev, D. I.) *See* **History and methodology of the natural sciences, 80d:01001**
(Knels, Gert) *See* **Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss, 80i:01001**
(Laplace, Pierre Simon) *See* **Proceedings: Commemorative Meeting for the Second Centennial of the Birth of Carl Friedrich Gauss and the 150th Anniversary of the Death of Pierre Simon Laplace, 80j:01001**
(Rybnikov, K. A.) *See* **History and methodology of the natural sciences, 80d:01002**
(Sachs, Horst) *See* **Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss, 80i:01001**
(Sarangov, C. S.) *See* **History and methodology of the natural sciences, 80d:01001**
(Stanton, R. J.) *See* **History of analysis, 80a:01001**
(Tjulina, I. A.) *See* **History and methodology of the natural sciences, 80d:01002**
(Wells, R. O., Jr.) *See* **History of analysis, 80a:01001**
Analysis *See* **History of analysis, 80a:01001**
Anniversary:
Birth of Amedeo Avogadro *See* **Proceedings: Commemorative Meeting for the Second Centennial of the Birth of Carl Friedrich Gauss and the 150th Anniversary of the Death of Pierre Simon Laplace, 80j:01001**
Birth of Carl Friedrich Gauss *See* **Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss, 80i:01001; Proceedings: Commemorative Meeting for the Second Centennial of the Birth of Carl Friedrich Gauss and the 150th Anniversary of the Death of Pierre Simon Laplace, 80j:01001** *and* **Festschrift: Gauss, Carl Friedrich, 80k:01001**
Death of Pierre Simon de Laplace *See* **Proceedings: Commemorative Meeting for the Second Centennial of the Birth of Carl Friedrich Gauss and the 150th Anniversary of the Death of Pierre Simon Laplace, 80j:01001**
Berlin *See* **Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss, 80i:01001**
Conference:
History of Analysis *See* **History of analysis, 80a:01001**
Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss ★Festakt und Tagung aus Anlass des 200. Geburtstages von Carl Friedrich Gauss. **80i:01001**
Festschrift:
Gauss, Carl Friedrich ★Festschrift zum 200. Geburtstag von Carl Friedrich Gauss. **80k:01001**
History of analysis ★History of analysis. **80a:01001**
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Houston, Tex. *See* **History of analysis, 80a:01001**
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Natural sciences *See* **History and methodology of the natural sciences, 80d:01001**
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01A05 General histories, source books

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History of mathematics *See* **Abrégé d'histoire des mathématiques, 80k:01002a** *and* **Abrégé d'histoire des mathématiques, 80k:01002b**

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Handbook:
Mathematical terms *See* **Aleksandrova, N. V., (80a:00013)**

01A10 Primitive, Paleolithic, Neolithic

Angell, Ian O. Megalithic mathematics, ancient almanacs or neolithic nonsense. **80f:01002**

01A15 Pre-Greek, Egyptian

Secondary classifications:

Biggs, Norman The roots of combinatorics. (French summary) **(80h:05003)**

01A17 Babylonian

Aaboe, Asger (*with* Hamilton, Norman T.) Contributions to the study of Babylonian lunar theory. **80m:01005**
Hamilton, Norman T. *See* **Aaboe, Asger, 80m:01005**
Kimble, Gerald W. From pebbles to position. **80j:01004**
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Seidenberg, A. The origin of mathematics. **80d:01004**

01A20 Greek

(Archimedes) *See* **Knorr, Wilbur R., 80a:01002; Knorr, Wilbur R., 80j:01006** *and* **Žitomirskiĭ, S. V., 80k:01005**
(Aristotle) *See* **Machamer, Peter K., 80j:01007**
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(Euclid) *See* **Fischler, Roger, 80j:01005**
Fischler, Roger A remark on Euclid II, 11. (French summary) **80j:01005**
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(Heraclides of Pontus) *See* **van der Waerden, B. L., 80k:01004**
Knorr, Wilbur R. Archimedes and the spirals: the heuristic background. (French summary) **80j:01006**
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Machamer, Peter K. Aristotle on natural place and natural motion. **80j:01007**
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Rozenfel'd, B. A. *See* **Baĭmakova, I. G.; et al., 80d:01005**
Slavutin, E. I. *See* **Baĭmakova, I. G.; et al., 80d:01005**
Stamatis, Evangelos S. ★Reprints. **80m:01007**
Szabó, Árpád ★The beginnings of Greek mathematics. **80b:01001**
(Ungar, A. M.) *See* **Szabó, Árpád, 80b:01001**
Viola, Tullio *See* **Giacardi, Livia, 80m:01006**
van der Waerden, B. L. Die Postulate und Konstruktionen in der frühgriechischen Geometrie. **80a:01004**
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★Απολλωνιου Κωνικα. Τομοσ Β'. (Greek) [Apollonios: Conics. Vol. 2] **(80g:01036b)**
★Απολλωνιου Κωνικα. Τομοσ Γ'. (Greek) [Apollonios: Conics. Vol. 3] **(80g:01036c)**
★Απολλωνιου Κωνικα. Τομοσ Δ'. (Greek) [Apollonios: Conics. Vol. 4] **(80g:01036d)**
(Archimedes) *See* **Clagett, Marshall, (80g:01005)** *and* **Clagett, Marshall, (80g:01006)**
Biggs, Norman The roots of combinatorics. (French summary) **(80h:05003)**
Clagett, Marshall ★Archimedes in the Middle Ages. Vol. Two. **(80g:01005)**
★Archimedes in the Middle Ages. Vol. Three. **(80g:01006)**
Dumitriu, Anton Necessary and contingent deduction. **(80h:03009)**
Englebretsen, George Aristotle on the subject of predication. **(80b:03007)**
(Euclid) *See* **Theisen, Wilfred, (80e:01009)**
(Grosseteste, Robert) *See* **Serene, Eileen F., (80i:01005)**
Gyekye, Kwame Aristotle on predication: an analysis of *Anal. Post. 83a*. **(80f:03002)**
Hadgopoulos, Demetrius J. The principle of the division into four figures in traditional logic. **(80f:03003)**
Loux, Michael J. Form, species and predication in *Metaphysics* Z, H, and ϑ. **(80d:03006)**
Mueller, Ian The completeness of Stoic propositional logic. **(80d:03011)**
Serene, Eileen F. Robert Grosseteste on induction and demonstrative science. **(80i:01005)**
Stahl, Gerold Le dominateur et ses problèmes. **(80j:03033)**
(Stamatis, Evangelos S.) *See* **Apollonius, (80g:01036a); Apollonius, (80g:01036b); Apollonius, (80g:01036c)** *and* **Apollonius, (80g:01036d)**
Theisen, Wilfred A note on John of Beaumont's version of Euclid's *De visu*. **(80e:01009)**
Thom, Paul Aristotle's syllogistic. **(80h:03004)**
van der Waerden, B. L. The Great Year in Greek, Persian and Hindu astronomy. **(80b:01007)**
(William of Moerbeke) *See* **Clagett, Marshall, (80g:01005)** *and* **Clagett, Marshall, (80g:01006)**
Conics *See* **Apollonius, (80g:01036a); Apollonius, (80g:01036b); Apollonius, (80g:01036c)** *and* **Apollonius, (80g:01036d)**

01A25 China

Ang, Tian Se Chinese interest in right-angled triangles. (Chinese summary) **80d:01006**
Hadgopoulos, Demetrius J. The middle term. **80b:01002**
Lam, Lay Yong Chu Shih-chieh's *Suan-hsüeh ch'i-meng* (Introduction to mathematical studies). **80m:01008**
(Liu Hui) *See* **Wagner, Donald Blackmore, 80e:01001**
Swetz, Frank The evolution of mathematics in ancient China. **80f:01003**
Wagner, Donald Blackmore An early Chinese derivation of the volume of a pyramid: Liu Hui, third century A.D. (German summary) **80e:01001**

Secondary classifications:

Biggs, Norman The roots of combinatorics. (French summary) **(80h:05003)**
Jha, Ganganand Singh Mathematics in Tantra texts. **(80m:01015)**

01A27 Japan

Fukagawa, Hidetoshi Mathematical study of *Sampō-Kyūseki-Tsūkō*. I. (Japanese) **80k:01006**
Hagino, Kōgō Suggestions at the time of making a chronological table of the history of mathematics. (Japanese) **80k:01007**
See also **Ōya, Shinichi; et al., 80k:01008**
Hamada, Toshio *See* **Ōyama, Makoto; et al., 80c:01001**
Hirayama, Akira On the "Ketsugishō Tōjutsu" of Takakazu Seki. (Japanese) **80b:01003**
Iizuka, Masaaki *See* **Ōyama, Makoto; et al., 80c:01001**
Kobayashi, Tatsuhiko *See* **Ōyama, Makoto; et al., 80c:01001** *and* **Michiwaki, Yoshimasa; et al., 80f:01004**
Kodama, Akito The works of Mitsuyoshi Yoshida, other than *Jingoki*. (Japanese) **80c:01002**
Michiwaki, Yoshimasa (*with* Kobayashi, Tatsuhiko; Ōyama, Makoto; Tanaka, Kaoru) On the cycloids in the old Japanese mathematics. **80f:01004**
See also **Ōyama, Makoto; et al., 80c:01001**
Ōtake, Shigeo *See* **Ōyama, Makoto; et al., 80c:01001**
Ōya, Shinichi (*with* Suzuki, Hisao; Shimodaira, Kazuo; Hagino, Kōgō; Takagi, Shigeo) Memories of the days when the Society was founded. (Japanese) **80k:01008**
Ōyama, Makoto (*with* Hamada, Toshio; Iizuka, Masaaki; Ōtake, Shigeo; Kobayashi, Tatsuhiko; Tanaka, Kaoru; Tanaka, Mitsuru; Michiwaki, Yoshimasa) Elliptic problems occurring in "sangaku". (Japanese) **80c:01001**
See also **Michiwaki, Yoshimasa; et al., 80f:01004**
Shimodaira, Kazuo On the formulas for arc, arrow and chord in the early period of the Tokugawa shōgunate. (Japanese) **80f:01005**
Land surveying problems described in "Sanyo-ki". (Japanese) **80k:01009**
See also **Ōya, Shinichi; et al., 80k:01008**
Suzuki, Hisao The four estates and arithmetics—Nō (farmers). (Japanese) **80f:01006**
See also **Ōya, Shinichi; et al., 80k:01008**
Takagi, Shigeo *See* **Ōya, Shinichi; et al., 80k:01008**
Takagi, Shigeyuki A study of sangaku (mathematical votive picture tablets) in Gifu prefecture. I. (Japanese. English summary) **80d:01007a**
A study of sangaku (mathematical votive picture tablets) in Gifu prefecture. II. (Japanese. English summary) **80d:01007b**
A study of sangaku (mathematical votive picture tablets) found in Gifu prefecture. III. (Japanese. English summary) **80d:01007c**
A study of sangaku (mathematical votive picture tablets) found in Gifu prefecture. IV. (Japanese. English summary) **80d:01007d**
Tanaka, Kaoru *See* **Ōyama, Makoto; et al., 80c:01001** *and* **Michiwaki, Yoshimasa; et al., 80f:01004**
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Carroll, Lewis ★Symbolic logic. **(80j:03002)**
Clagett, Marshall ★Studies in medieval physics and mathematics. **(80m:01017)**
Courant, Richard (*with* Robbins, Herbert) ★What is mathematics? **(80i:00001)**
(Galilei, Galileo) *See* **Koyré, Alexandre, (80e:01013)**
Ginzburg, V. L. ★О теории относительности. (Russian) [The theory of relativity] **(80k:83001)**
(Grigor'jan, A. T.) *See* **History of natural science: literature published in the USSR, (80d:00025)**
Hadamard, Jacques ★Задача Коши для линейных уравнений с частными производными гиперболического типа. (Russian) [The Cauchy problem for linear partial differential equations of hyperbolic type] **(80b:35091)**
Hamel, Georg ★Theoretische Mechanik. **(80a:70001)**
Ignat'ev, E. I. ★В царстве смекалки. (Russian) [In the kingdom of the mind] **(80k:00005)**
(Ivanov, D. D.) *See* **History of natural science: literature published in the USSR, (80d:00025)**
Kanevskis, A. (*with* Reiziņš, L.; Riekstiņš, E.) Works of mathematicians of Soviet Latvia for the years 1967–1975. (Russian) **(80d:01019)**
Kinowska, Małgorzata *See* **Bełkowska, Krystyna; et al., (80k:00016a); Majewska-Tronowicz, Jadwiga; et al., (80k:00016b)** *and* **Majewska-Tronowicz, Jadwiga; et al., (80k:00016c)**
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Lakatos, Imre ★Beweise und Widerlegungen. **(80k:00018)**
Majewska-Tronowicz, Jadwiga (*with* Michalczyk, Barbara; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 29/30 (Jan.–June 1978). (Polish) **(80k:00016b)**
(*with* Michalczyk, Barbara; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 31 (July–Sept. 1978). (Polish) **(80k:00016c)**
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(Spalt, Detlef D.) *See* **Lakatos, Imre, (80k:00018)**
(Šugaev, F. V.) *See* **Hadamard, Jacques, (80b:35091)**
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Walker, Robert J. ★Algebraic curves. **(80c:14001)**
(Wittgenstein, Ludwig) *See* **Bensch, Rudolf, (80i:03004)**
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(Zahar, Elie) *See* **Lakatos, Imre, (80k:00018)**
Anniversary:
Archives of the Academy of Sciences of the USSR The 250th anniversary of the Archives of the Academy of Sciences of the USSR. (Russian) **(80a:01026)**
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One hundred fourth critical bibliography of the history of science and its cultural influences (to January 1979). **(80k:00017b)**
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01A80 Sociology (and profession) of mathematics

Bloor, David Polyhedra and the abominations of Leviticus. **80f:01027**
See also **Worrall, John, 80m:01046**
Browder, Felix E. Mathematics and society—a historical view. **80d:01025**
Keitel, Christine (*with* Otte, Michael) Probleme der Profession und des professionellen Wissens des Mathematiklehrers. **80k:01069**
Nöbauer, Wilfried Die Bedeutung der Algebra für die Entstehung des heutigen Gesellschaftssystems. **80i:01018**
Otte, Michael *See* **Keitel, Christine, 80k:01069**
Scholl, Lars U. Bürokratisierung und Professionalisierung. Zur Genesis technischen Beamtentums im Staatsdienst am Beispiel des Königreichs Hannover. **80g:01037**
Worrall, John A reply to David Bloor: "Polyhedra and the abominations of Leviticus" [British J. Hist. Sci. **11** (1978), no. 39, part 3, 245–272; MR 80f:01027]. **80m:01046**

Secondary classifications:

(Goodacre, Robert) *See* **Inkster, Ian, (80h:01019)**
Inkster, Ian Robert Goodacre's astronomy lectures (1823–1825), and the structure of scientific culture in Philadelphia. **(80h:01019)**
Schreier, Wolfgang Physik und Industrielle Revolution. **(80k:01020)**

01A99 Miscellaneous topics

Iséki, Kiyoshi Non-Greek, nonstandard objects in mathematics. **80d:01026**

Secondary classifications:

Seltman, Muriel (*with* Seltman, P. E. J.) Growth processes and formal logic. Comments on history and mathematics regarded as combined educational tools. **(80a:00014)**
Seltman, P. E. J. *See* **Seltman, Muriel, (80a:00014)**

03–XX MATHEMATICAL LOGIC AND FOUNDATIONS

03–01 Elementary exposition, textbooks

Batagelj, Vladimir Theories. (Slovenian. English summary) **80m:03001**
Börger, Egon Ein einfacher Beweis für die Unentscheidbarkeit der klassischen Prädikatenlogik. **80c:03001**
Bradley, Raymond (*with* Swartz, Norman) ★Possible worlds. **80m:03002**
Copi, Irving M. ★Symbolic logic. **80c:03002**
(Coulmas, Florian) *See* **Hughes, G. E.; et al., 80f:03001**
Cresswell, Max J. *See* **Hughes, G. E., 80f:03001**
Dawson, John W., Jr. The Gödel incompleteness theorem from a length-of-proof perspective. **80i:03001**
Diller, Justus ★Klassische Prädikatenlogik. **80c:03003**
Durnev, V. G. ★Элементы теории множеств и математической логики. (Russian) [Elements of set theory and mathematical logic] **80g:03001**
Edwards, Robert E. ★A formal background to mathematics. Ia. **80k:03001a**
★A formal background to mathematics. Ib. **80k:03001b**
(Enderton, H. B.) *See* **Lightstone, A. H., 80i:03002**
Franz, Wolfgang ★Über mathematische Aussagen, die samt ihrer Negation nachweislich unbeweisbar sind. **80c:03004**
Gauthier, Yvon ★Méthodes et concepts de la logique formelle. **80e:03001**
Hafner, I. The deduction theorem. (Slovenian. English summary) **80m:03003**
Hałkowska, Katarzyna *See* **Słupecki, Jerzy; et al., 80a:03001**
Hamilton, Alan G. ★Logic for mathematicians. **80c:03005**
Hughes, G. E. (*with* Cresswell, Max J.) ★Einführung in die Modallogik. **80f:03001**
Lightstone, A. H. ★Mathematical logic. **80i:03002**
Mendelson, Elliott ★Introduction to mathematical logic. **80d:03001**
Piróg-Rzepecka, Krystyna *See* **Słupecki, Jerzy; et al., 80a:03001**
Pisanski, T. Computability and solvability. (Slovenian. English summary) **80m:03004**
(Posner, Roland) *See* **Hughes, G. E.; et al., 80f:03001**
Prestel, Alexander Entscheidbarkeit mathematischer Theorien. **80j:03001**
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Carroll, Lewis ★Symbolic logic. **(80j:03002)**
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Oikkonen, Juha Applications of model theory in mathematics. (Finnish. English summary) **(80m:03070)**

03–02 Advanced exposition (research surveys, monographs, etc.)

Seldin, Jonathan P. Recent advances in Curry's program. **80a:03002b**
Shoesmith, D. J. (*with* Smiley, T. J.) ★Multiple-conclusion logic. **80k:03001**
Smiley, T. J. *See* **Shoesmith, D. J., 80k:03001**

Secondary classifications:

Devlin, Keith J. ★Fundamentals of contemporary set theory. **(80j:04001)**
Taylor, Walter Equational logic. **(80j:03042)**

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(Bartley, William Warren, III) *See* **Carroll, Lewis, 80j:03002**
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Daye, Douglas Dunmore Empirical falsifiability and the frequence of darśana relevance in the sixth century Buddhist logic of Śānkarasvāmin. **80i:03003**
Metalogical cliches (proto-variables) and their restricted substitution in sixth century Buddhist logic. **80d:03002**
Freddoso, Alfred J. O-propositions and Ockham's theory of supposition. **80h:03003**
Goldfarb, Warren D. Logic in the twenties: the nature of the quantifier. **80j:03003**
Gyekye, Kwame Aristotle on predication: an analysis of *Anal. Post. 83a*. **80f:03002**
Hadgopoulos, Demetrius J. The principle of the division into four figures in traditional logic. **80f:03003**
Kielkopf, Charles F. The specific reading of A-propositions in a defense of William of Sherwood. **80k:03002**
(Leibniz, Gottfried Wilhelm) *See* **McCullough, Laurence B., 80d:03003**
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Murdoch, John E. Propositional analysis in fourteenth-century natural philosophy: a case study. **80f:03005**
(Ockham, William of) *See* **Weidemann, Hermann, 80m:03006**
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(Grosseteste, Robert) *See* **Serene, Eileen F., (80i:01005)**
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(Körner, S.) *See* **Robinson, Abraham, (80h:01039b)**
Kreiser, L. Eine Rekonstruktion der logischen Auffassungen W. Wundts. **(80j:03010)**
Laita, Luis M. Influences on Boole's logic: the controversy between William Hamilton and Augustus De Morgan. **(80k:01037)**
Lehtinen, Anja Inkeri *See* **Knuuttila, Simo, (80g:01007)**
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Mueller, Ian The completeness of Stoic propositional logic. **(80d:03011)**
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★Selected papers of Abraham Robinson. Vol. II. **(80h:01039b)**
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Gödel, Kurt Kurt Gödel. **(80b:01029)**

03–04 Explicit machine computation and programs (not the theory of computation or programming)

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03–06 Proceedings, conferences, etc.

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03B40 Combinatory logic and λ-calculus

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03B50 Many-valued logic

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International Symposium on Multiple-Valued Logic ★Proceedings of the Ninth International Symposium on Multiple-Valued Logic. **(80k:94001)**
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03B52 Fuzzy logic [See also 94D05.]

Almog, J. Perhaps (?), new logical foundations are needed for quantum mechanics. **80d:03023**
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Gaines, Brian R. Fuzzy and probability uncertainty logics. **80m:03059**
Pavelka, Jan On fuzzy logic. I. **80j:03038a**
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Dubois, Didier (*with* Prade, Henri) Operations in a fuzzy-valued logic. **(80m:94120)**
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Wechler, Wolfgang ★The concept of fuzziness in automata and language theory. **(80g:68105)**
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03B55 Intermediate logics

Capińska, Ewa On intermediate logics which can be axiomatised by means of implicationless formulas. **80m:03060a**
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03B60 Other nonclassical logic

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03Cxx Model theory

03C05 Equational classes, universal algebra [See also 08Axx.]

Givant, Steven Universal Horn classes categorical or free in power. **80c:03032**
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03C10 Quantifier elimination and related topics

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Weispfenning, Volker A note on $\aleph_0$-categorical model-companions. **(80g:03032)**
Wheeler, William H. The first order theory of N-colorable graphs. **(80g:03035)**

03C15 Countable models

Baudisch, Andreas (*with* Tuschik, Hans-Peter) Eine Bemerkung über Vermeidung von Typen in überabzählbaren Modellen. (Russian, English and French summaries) **80e:03025**
Czelakowski, Janusz A remark on countable algebraic models. **80i:03042**
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03C20 Ultraproducts and related constructions

Andréka, Hajnal (*with* Makai, E., Jr.; Márki, L.; Németi, István) Reduced products in categories. **80h:03049**
Makai, E., Jr. *See* **Andréka, Hajnal; et al., 80h:03049**
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03C25 Model-theoretic forcing

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03C30 Other model constructions

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03C35 Categoricity and completeness

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Paillet, Jean-Luc Théories complètes $\aleph_0$-catégoriques et non finiment modèle-complétables. (English summary) **80a:03039**
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Keisler, H. Jerome The stability function of a theory. **(80a:03040)**
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Olin, Philip Aleph-zero categorical Stone algebras. **(80a:03043)**
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Wheeler, William H. The first order theory of N-colorable graphs. **(80g:03035)**
Yutani, Hiroshi Categoricity in the theory of BCK-algebras. **(80a:03084)**

03C40 Preservation, interpolation, and definability theorems

Halkowska, Katarzyna (*with* Płonka, Jerzy) On formulas preserved by the sum of a direct system of relational systems. **80g:03033**
Harnik, Victor Refinements of Vaught's normal form theorem. **80l:03044**
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Volger, Hugo Preservation theorems for limits of structures and global sections of sheaves of structures. **80d:03029**

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03C45 Stability

Bouscaren, Elizabeth (*with* Chatzidakis, Zoé) Modèles premiers et atomiques: théorème des deux cardinaux dans les théories totalement transcendantes. **80d:03030a**
Chatzidakis, Zoé *See* **Bouscaren, Elizabeth, 80d:03030a**
Delon, Françoise Types localement isolés et théorème des deux cardinaux dans les théories stables dénombrables. **80d:03030b**
Ehrsam, Sébastien L'ordre fondamental, le théorème de la borne, le théorème de la relation d'équivalence finie. **80c:03034**
Exposé élémentaire de la théorie de la stabilité. **80e:03029**
Forrest, William Kramer Some basic results in the theory of ω-stable theories. **80m:03065**
Keisler, H. Jerome The stability function of a theory. **80a:03040**
Lachlan, Alistair H. Spectra of ω-stable theories. **80a:03041**
Lascar, Daniel (*with* Poizat, Bruno) An introduction to forking. **80k:03030**
Poizat, Bruno Suites d'indiscernables dans les théories stables. **80e:03030**
Une théorie ω_1-catégorique à α_T fini. **80j:03043**
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Shelah, Saharon On uniqueness of prime models. **80m:03066**

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(Poizat, Bruno) *See* **Groupe d'Étude: Théories Stables, (80b:03003)**
Rose, Bruce I. The $\aleph_1$-categoricity of strictly upper triangular matrix rings over algebraically closed fields. **(80d:03031)**
Shelah, Saharon Hanf number of omitting type for simple first-order theories. **(80k:03031)**
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Paris *See* **Groupe d'Étude: Théories Stables, (80b:03003)**
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03C50 Models with special properties (saturated, rigid, etc.)

Anapolitanos, D. A. A theorem on absolute indiscernibles. **80e:03031**
Czelakowski, Janusz A purely algebraic proof of the omitting types theorem. **80m:03067**
Galvin, Fred (*with* Hesse, G.; Steffens, Karsten) On the number of automorphisms of structures. **80b:03038**
Hesse, G. *See* **Galvin, Fred; et al., 80b:03038**
Mlček, J. A note on cofinal extensions and segments. **80l:03045**
Poizat, Bruno Rangs des types dans les corps différentiels. **80c:03036**
Shelah, Saharon Hanf number of omitting type for simple first-order theories. **80k:03031**
Steffens, Karsten *See* **Galvin, Fred; et al., 80b:03038**

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Harnik, Victor (*with* Makkai, Michael) New axiomatizations for logics with generalized quantifiers. **(80f:03040)**
Harrington, Leo A. *See* **Abramson, Fred G., (80a:03045)**
Makkai, Michael *See* **Harnik, Victor, (80f:03040)**
Weispfenning, Volker A note on $\aleph_0$-categorical model-companions. **(80g:03032)**

03C52 Properties of classes of models

Eklof, Paul C. Classes closed under substructures and direct limits. **80m:03068**
Forrest, William Kramer A note on universal classes with applications to the theory of graphs. **80f:03031**
Kaiser, Klaus On relational selections for complete theories. **80c:03037**
Mekler, Alan H. On residual properties. **80j:03044**
Miller, Douglas E. On classes closed under unions of chains. **80e:03032**
Pinter, Charles C. Properties preserved under definitional equivalence and interpretations. **80b:03039**
Tulipani, Sauro The Hanf number for classes of algebras whose largest congruence is always finitely generated. **80e:03033**

03C55 Set-theoretic model theory

Benda, Miroslav Compactness for omitting of types. **80k:03032**
Gilham, David W. H. Intervals of binary relations. **80l:03046**

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Ben-David, Shai On Shelah's compactness of cardinals. **(80f:03060a)**
Correction to: "On Shelah's compactness of cardinals" (Israel J. Math. **31** (1978), no. 1, 34–56). **(80f:03060b)**
Feferman, Solomon Generalizing set-theoretical model theory and an analogue theory on admissible sets. **(80m:03084)**
Lolli, Gabriel (*with* Marek, Wiktor) On elementary theories of v. Neumann's levels. (Italian summary) **(80j:03074)**
Marek, Wiktor *See* **Lolli, Gabriel, (80j:03074)**

03C60 Model-theoretic algebra [See also 08C10.]

Baldwin, John T. Some EC_Σ classes of rings. **80a:03042**
Baur, Walter (*with* Cherlin, Gregory; Macintyre, Angus) Totally categorical groups and rings. **80e:03034**
Brown, Scott Shorey Bounds on transfer principles for algebraically closed and complete discretely valued fields. **80j:03045**
Cherlin, Gregory Superstable division rings. **80g:03034**
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See also **Baur, Walter; et al., 80e:03034**
Cowles, John The theory of Archimedean real closed fields in logics with Ramsey quantifiers. **80f:03032**
Deissler, Rainer Minimal and prime models of complete theories of torsion free abelian groups. **80e:03035**
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Mekler, Alan H. Model complete theories with a distinguished substructure. **80f:03033**
Oikkonen, Juha Applications of model theory in mathematics. (Finnish. English summary) **80m:03070**
Olin, Philip Aleph-zero categorical Stone algebras. **80a:03043**
Podewski, K.-P. (*with* Reineke, Joachim) Algebraically closed commutative local rings. **80c:03039**
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Rings which admit elimination of quantifiers. **80e:03036a**
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Rubin, Matatyahu On the automorphism groups of homogeneous and saturated Boolean algebras. **80d:03032**
Saracino, Dan (*with* Wood, Carol) Periodic existentially closed nilpotent groups. **80m:03071**
Schmid, Jürg Algebraically and existentially closed distributive lattices. **80j:03046**
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Singer, Michael F. The model theory of ordered differential fields. **80a:03044**
Skornjakov, L. A. Axiomatizability of a class of injective polygons. (Russian) **80e:03037**
Takarenko, A. I. The group-theoretic properties N_0, N and $\hat{N}$ are not axiomatizable. (Russian) **80l:03047**
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Andréka, Hajnal (*with* Makai, E., Jr.; Márki, L.; Németi, István) Reduced products in categories. **(80h:03049)**
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Prest, Mike Some model-theoretic aspects of torsion theories. **(80a:18009)**
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Prestel, Alexander (*with* Ziegler, Martin) Model-theoretic methods in the theory of topological fields. **(80f:54034)**
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Robbin, Joel W. Evaluation fields for power series. I. The nullstellensatz. **(80m:13006a)**
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Velger, Hugo Preservation theorems for limits of structures and global sections of sheaves of structures. **(80d:03029)**
Weispfenning, Volker A note on $\aleph_0$-categorical model-companions. **(80g:03032)**
Werner, Heinrich ★Discriminator-algebras. **(80f:08009)**
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03C65 Models of specific theories

Abramson, Fred G. (*with* Harrington, Leo A.) Models without indiscernibles. **80a:03045**
Harrington, Leo A. *See* **Abramson, Fred G., 80a:03045**
Kotlarski, Henryk A note on countable well-ordered models. (Russian summary) **80a:03046**
Marek, Wiktor (*with* Nyberg, A. M.) Extendability of ZF models in the von Neumann hierarchy to models of KM theory of classes. **80f:03034**
Mead, Jerud Recursive prime models for Boolean algebras. **80j:03050**
Nyberg, A. M. *See* **Marek, Wiktor, 80f:03034**
Pasini, Antonio Model-theoretic approach to geometries. **80j:03051**
Pinus, A. G. Elementary equivalence of topological spaces. (Russian) **80h:03050**
Potthoff, K. Orderings of types of countable arithmetic. **80f:03035**
Schmerl, James H. Extending models of arithmetic. **80f:03036**
Shelah, Saharon (*with* Stern, Jacques) The Hanf number of the first order theory of Banach spaces. **80a:03047**
Sonenberg, E. A. Nonstandard models of ordinal arithmetics. **80h:03051**
Stern, Jacques *See* **Shelah, Saharon, 80a:03047**
Tamihai, Mark A note on conservative extensions. **80d:03033**
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Dehornoy, Patrick Iterated ultrapowers and Prikry forcing. **(80k:03057)**
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Loats, James T. (*with* Rubin, Matatyahu) Boolean algebras without nontrivial onto endomorphisms exist in every uncountable cardinality. **(80f:03071)**
Mlček, J. A note on cofinal extensions and segments. **(80l:03045)**
Mostowski, A. Włodzimierz *See* **Doner, John E.; et al., (80d:03027a)**
Penzin, Ju. G. The problem of twins in formal arithmetic. (Russian) **(80m:03115)**
Rosenthal, John W. Truth in all of certain well-founded countable models arising in set theory. II. **(80l:03065)**
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Sonenberg, E. A. On the elementary theory of inductive order. **(80d:03027b)**
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Whiteley, Walter Logic and invariant theory. IV. Invariants and syzygies in combinatorial geometry. **(80g:05023)**
Wolter, Helmut Entscheidbarkeit der Theorie der Wohlordnung mit Elimination der Quantoren. (Russian, English and French summaries) **(80c:03018)**

03C70 Logic on admissible sets

Adamson, Alan Admissible sets and the saturation of structures. **80h:03052**
Bruce, Kim B. (*with* Keisler, H. Jerome) $L_A(\exists)$. **80f:03037**
Cutland, Nigel Σ_1-compactness in languages stronger than $\mathcal{L}_A$. **80h:03041**
Keisler, H. Jerome *See* **Bruce, Kim B., 80f:03037**
Makkai, Michael There are atomic Nadel structures. **80e:03038**
Oikkonen, Juha Hierarchies of model-theoretic definability—an approach to second-order logics. **80l:03048**

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Harnik, Victor (*with* Makkai, Michael) New axiomatizations for logics with generalized quantifiers. **(80f:03040)**
Makkai, Michael *See* **Harnik, Victor, (80f:03040)**
Nadel, Mark E. Infinitary intuitionistic logic from a classical point of view. **(80f:03027)**
Oikkonen, Juha Second-order definability, game quantifiers and related expressions. **(80k:03036)**

03C75 Other infinitary logic

Cohen, Paul E. Some continuity properties for ultraproducts. **80h:03042**
Fujiwara, Tsuyoshi A variation of Lyndon-Keisler's homomorphism theorem and its applications to interpolation theorems. **80h:03043**
Green, Judy κ-Suslin logic. **80k:03033**
Some model theory for game logics. **80h:03053**
Kueker, David W. Uniform theorems in infinitary logic. **80f:03038**
Miller, Douglas E. An application of invariant sets to global definability. **80m:03072**
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Harnik, Victor Refinements of Vaught's normal form theorem. **(80f:03044)**
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Monk, J. Donald Omitting types algebraically. **(80a:03077)**
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Hierarchies of model-theoretic definability—an approach to second-order logics. **(80i:03048)**
Vershinin, K. P. *See* **Gergely, T., (80b:03015)**

03C80 Logic with extra quantifiers and operators

Bernhardt, Klaus Abschliessbarkeit von Kripke-Semantiken. (Russian, English and French summaries) **80e:03039**
Bruce, Kim B. Ideal models and some not so ideal problems in the model theory of $L(Q)$. **80a:03048**
Cowles, John The relative expressive power of some logics extending first-order logic. **80f:03039**
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Harel, David Characterizing second-order logic with first-order quantifiers. **80k:03034**
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Hoover, Douglas N. Probability logic. **80b:03044**
Kaufmann, Matt A new omitting type theorem for $L(Q)$. **80m:03073**
Krynicki, Michal (*with* Lachlan, Alistair H.) On the semantics of the Henkin quantifier. **80b:03054**
Lachlan, Alistair H. *See* **Krynicki, Michal, 80b:03054**
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Makowsky, J. A. Quantifying over countable sets: positive vs. stationary logic. **80j:03052**
The reals cannot be characterized topologically with strictly local properties and countability axioms. **80h:03055**
Morgenstern, Carl F. The measure quantifier. **80f:03041**
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A certain enumeration of one-place predicates. (Russian) **80j:03053**
The Hanf number for a calculus with the Härtig quantifier. (Russian) **80d:03034**
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Seese, Detlef G. Decidability and generalized quantifiers. **80b:03046**
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Wolter, Helmut Entscheidbarkeit der Theorie der Wohlordnung mit Elimination der Quantoren. (Russian, English and French summaries) **(80c:03018)**

03C85 Second- and higher-order model theory

Shelah, Saharon Models with second-order properties. I. Boolean algebras with no definable automorphisms. **80b:03047a**
Models with second-order properties. II. Trees with no undefined branches. **80b:03047b**
Appendix to: "Models with second-order properties. II. Trees with no undefined branches" (Ann. Math. Logic **14**(1978), no. 1, 73–87). **80b:03047c**
Ziegler, Martin Definable bases of monotone systems. **80b:03048**

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Bennett, Michael Demonstratives and indexicals in Montague grammar. **(80k:03029)**
Boudreaux, Jack C. Defining general structures. **(80i:03021)**
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Pinus, A. G. The Hanf number for a calculus with the Härtig quantifier. (Russian) **(80d:03034)**

03C90 Nonclassical models (Boolean-valued, sheaf, etc.)

Burris, Stanley (*with* Jeffers, Errol) On the simplicity and subdirect irreducibility of Boolean ultrapowers. **80d:03036**
Dunn, J. Michael A theorem in 3-valued model theory with connections to number theory, type theory, and relevant logic. **80h:03056**
Jeffers, Errol *See* **Burris, Stanley, 80d:03036**
Loullis, George Infinite forcing for Boolean valued models. **80f:03042**
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Smoryński, Craig The axiomatization problem for fragments. **80e:03040**
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Cartier, Pierre Logique, catégories et faisceaux [d'après F. Lawvere et M. Tierney]. **(80m:03111)**
(Lawvere, F.) *See* **Cartier, Pierre, (80m:03111)**
Schwartz, Dietrich Untersuchungen über die Banach-Logik. **(80e:03020)**
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***B*-valued analysis and nonstandard analysis** ★*B*-valued analysis and nonstandard analysis. (Japanese) **(80b:03002)**
Kyoto *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**
Nonstandard analysis *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**
Symposium:
B-Valued Analysis and Nonstandard Analysis *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**

03C95 Abstract model theory

Secondary classifications:

Oikkonen, Juha Second-order definability, game quantifiers and related expressions. **(80k:03036)**

03C99 None of the above, but in this section

Millar, Terrence S. Foundations of recursive model theory. **80a:03051**

Secondary classifications:

Sette, A. M. (*with* Sette, J. S.) Functorialization of first-order language with finitely many predicates. **(80h:18003)**
Sette, J. S. *See* **Sette, A. M., (80h:18003)**
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03Dxx Recursion theory

Hermes, Hans ★Aufzählbarkeit, Entscheidbarkeit, Berechenbarkeit. **80b:03049**

Secondary classifications:

Börger, Egon Ein einfacher Beweis für die Unentscheidbarkeit der klassischen Prädikatenlogik. **(80c:03001)**
(Fenstad, Jens Erik) *See* **Generalized recursion theory, (80a:03004)**
(Gandy, R. O.) *See* **Generalized recursion theory, (80a:03004)**
(Sacks, Gerald E.) *See* **Generalized recursion theory, (80a:03004)**
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Oslo *See* **Generalized recursion theory, (80a:03004)**
Recursion theory *See* **Generalized recursion theory, (80a:03004)**
Symposium:
Generalized Recursion Theory *See* **Generalized recursion theory, (80a:03004)**

03D03 Thue and Post systems, etc.

Cochet, Yves Church-Rosser congruences on free semigroups. **80i:03051**
Wirsing, Martin Small universal Post systems. **80m:03075**

Secondary classifications:

Gladstone, M. D. The decidability of one-variable propositional calculi. **(80f:03016)**
Maslov, S. Ju. Macroevolution as deduction process. **(80b:92018)**

03D05 Automata and formal grammars in connection with logical questions [See also 18B20, 68Dxx, 68F10.]

Schwartz, Dietrich Kanonische Abbildungen und Eilenberg-Maschinen. **80c:03042**
Smikun, L. B. The degree of unsolvability of algorithmic problems connected with automata operation on groups. (Russian. English summary) **80d:03037**
Wasserman, Howard C. A second-order axiomatic theory of strings. **80d:03038**

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Andréka, Hajnal (*with* Németi, István) The generalised completeness of Horn predicate-logic as a programming language. **(80c:68006)**
Börger, Egon A new general approach to the theory of the many-one equivalence of decision problems for algorithmic systems. **(80f:03045)**
Buszkowski, Wojciech Undecidability of some logical extensions of Ajdukiewicz-Lambek calculus. **(80f:03029)**
Damm, W. (*with* Fehr, E.; Indermark, K.) Higher type recursion and self-application as control structures. **(80e:68014)**
(Dimitrov, V.) *See* **Wechler, Wolfgang, (80g:68105)**
van Emde Boas, Peter (*with* Vitányi, Paul M. B.) A note on the recursive enumerability of some classes of recursively enumerable languages. **(80i:68037)**
Fehr, E. *See* **Damm, W.; et al., (80e:68014)**
Friedman, Emily P. (*with* Greibach, Sheila A.) Monadic recursion schemes: the effect of constants. **(80e:68202)**
Greibach, Sheila A. *See* **Friedman, Emily P., (80e:68202)**
Harrow, Keith Equivalence of some hierarchies of primitive recursive functions. **(80k:03039)**

Huzino, Seiiti *See* **Ilmori, Sueo, (80c:68036)**

Ibarra, Oscar H. Restricted one-counter machines with undecidable universe problems. **(80m:68044)**

Ilmori, Sueo (*with* Huzino, Seiiti) On LISP-realization of partial recursive functions. **(80c:68036)**

Indermark, K. *See* **Damm, W.; et al., (80e:68014)**

Kalandarišvili, N. G. An estimate of the algorithm of analysis in the language of equivalent transformations. (Russian. Georgian and English summaries) **(80d:68039)**

Klopotowski, Jacek Transition operators for (Z, Q)-machines. **(80f:68069)**

Lewis, Forbes D. On unsolvability in subrecursive classes of predicates. **(80h:03060)**

Lisovik, L. P. The identity problem for regular events over the direct product of a free and a cyclic semigroup. (Russian. English summary) **(80i:20037)**

Nakamura, Akira *See* **Ono, Hiroakira, (80k:03045)**

Németi, István *See* **Andréka, Hajnal, (80c:68006)**

Ono, Hiroakira (*with* Nakamura, Akira) Undecidability of the first-order arithmetic $A[P(x), 2x, x+1]$. **(80k:03045)**

Păun, Gheorghe An infinite hierarchy of contextual languages with choice. **(80c:68058)**

Ruohonen, Keijo On the decidability of the OL-DOL equivalence problem. **(80e:68197)**

Sciore, E. (*with* Tang, A.) Computability theory in admissible domains. **(80f:68056)**

Siefkes, Dirk An axiom system for the weak monadic second order theory of two successors. **(80a:03015)**

Stankiewicz, Ewa (*with* Żakowski, Wojciech) The (Z, Q)-systems. **(80f:68071)**

Tang, A. *See* **Sciore, E., (80f:68056)**

Vitányi, Paul M. B. *See* **van Emde Boas, Peter, (80i:68037)**

Vũ Duy Mãn Berechnung von Wortfunktionen auf deterministischen n-dimensionalen iterativen Automaten. (English and Russian summaries) **(80a:68054)**

Wechler, Wolfgang ★The concept of fuzziness in automata and language theory. **(80g:68105)**

Bemerkungen zur Fixpunkt-Semantik. **(80f:68090)**

Żakowski, Wojciech *See* **Stankiewicz, Ewa, (80f:68071)**

03D10 Turing machines and related notions [See also 68C40.]

Heffernan, James D. Discussion: some doubts about "Turing machine arguments". **80b:03050**

Janov, Ju. I. Several theorems on convolutions. (Russian. English summary) **80g:03036**

Nepomnjaščiĭ, V. A. (*with* Voelkel, Lutz) Zur Vollständigkeit von Befehlssystemen. (English and Russian summaries) **80a:03052**

Straight, David W. Domino f-sets. **80h:03057**

Voelkel, Lutz *See* **Nepomnjaščiĭ, V. A., 80a:03052**

Secondary classifications:

Brandstädt, Andreas On a family of complexity measures on Turing machines, defined by predicates. (German and Russian summaries) **(80g:03037)**

Cazacu, C. (*with* Cazacu, M.) An attempt to a general theory of algorithms. **(80e:68071)**

Cazacu, M. *See* **Cazacu, C., (80e:68071)**

Greibach, Sheila A. Visits, crosses, and reversals for nondeterministic off-line machines. **(80g:68102)**

Hartmanis, J. (*with* Immerman, N.; Mahaney, S.) One-way log-tape reductions. **(80e:68133)**

Immerman, N. *See* **Hartmanis, J.; et al., (80e:68133)**

Inoue, Katsushi (*with* Takanami, Itsuo) A note on closure properties of the classes of sets accepted by tape-bounded two-dimensional Turing machines. **(80f:68059a)**

(*with* Takanami, Itsuo) Three-way tape-bounded two-dimensional Turing machines. **(80e:68134)**

(*with* Takanami, Itsuo) Closure properties of three-way and four-way tape-bounded two-dimensional Turing machines. **(80f:68059b)**

Lugowski, Herbert Über Normalformen von Elementen freier Turing-Algebren. (Russian and English summaries) **(80j:03091)**

Mahaney, S. *See* **Hartmanis, J.; et al., (80e:68133)**

Sipser, Michael Halting space-bounded computations. **(80e:68137)**

Staiger, Ludwig (*with* Wagner, Klaus) Rekursive Folgenmengen. I. **(80f:03044)**

Takanami, Itsuo *See* **Inoue, Katsushi, (80e:68134); Inoue, Katsushi, (80f:68059a)** *and* **Inoue, Katsushi, (80f:68059b)**

Thomas, William J. A simple generalization of Turing computability. **(80h:03068)**

Wagner, Klaus *See* **Staiger, Ludwig, (80f:03044)**

Žák, Stanislav A Turing machine space hierarchy. **(80i:68040)**

03D15 Complexity of computation

Beunion, Victor L. On the problem of determining measure-independence. **80h:03058**

Brandstädt, Andreas On a family of complexity measures on Turing machines, defined by predicates. (German and Russian summaries) **80g:03037**

Case, John *See* **Moore, Dan, 80g:03038**

Dekhtjar', M. I. Complexity spectra of recursive sets and approximability of initial segments of complete problems. (German and Russian summaries) **80k:03038**

Hájek, Petr Arithmetical hierarchy and complexity of computation. **80b:03051**

Lewis, Harry R. Complexity of solvable cases of the decision problem for the predicate calculus. **80e:03041**

Lipton, Richard J. Model theoretic aspects of computational complexity. **80e:03042**

Moore, Dan (*with* Case, John) The complexity of total order structures. **80g:03038**

Stillwell, John C. Isotopy in surface complexes from the computational viewpoint. **80j:03059**

Šurygin, V. A. Estimates of the complexity of normal algorithms. (Russian) **80b:03059**

Uhlig, Dietmar A function of the algebra of logic with many subfunctions and a small complexity of realization. (Russian) **80i:03052**

Žukov, S. A. Some asymptotic estimates of the complexity of partial recursive functions. (Russian) **80f:03043**

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(*with* Selman, Alan L.) A second step toward the polynomial hierarchy. **(80g:68052)**

Berg, Eugen Peter (*with* Lischke, Gerhard) Zwei Sätze für schwache Erhaltungsmasse. **(80f:68041)**

Berman, Piotr Relationship between density and deterministic complexity of NP-complete languages. **(80g:68054)**

Bibel, W. Tautology testing with a generalized matrix reduction method. **(80i:03023)**

Cook, Stephen A. (*with* Reckhow, Robert A.) The relative efficiency of propositional proof systems. **(80e:03007)**

Fal'k, V. N. *See* **Kutepov, V. P., (80j:68023)**

Fischer, Michael J. *See* **Pippenger, Nicholas, (80f:68052)**

Garey, Michael R. (*with* Johnson, David S.) ★Computers and intractability. **(80g:68056)**

Gati, Georg Lower bounds for tree isomorphism problems by algebraic topology. **(80e:68104)**

Gordon, Dan Complexity classes of provable recursive functions. **(80e:68105)**

Greibach, Sheila A. Visits, crosses, and reversals for nondeterministic off-line machines. **(80g:68102)**

Jacobs, Barry E. α-speedable and non-α-speedable sets. **(80k:03047)**

α-naming and α-speedup theorems. **(80k:03046)**

Johnson, David S. *See* **Garey, Michael R., (80g:68056)**

Kosovskiĭ, N. K. Kolmogorov's subrecursive algorithmic complexity. (Russian. English summary) **(80a:68041)**

The complexity of the solvability of Boolean functional equations. (Russian) **(80d:68062)**

Kozen, Dexter Indexing of subrecursive classes. **(80d:03040)**

Kutepov, V. P. (*with* Fal'k, V. N.) Functional systems: theoretical and practical aspects. **(80j:68023)**

Lewis, Forbes D. On unsolvability in subrecursive classes of predicates. **(80h:03060)**

Lewis, Harry R. Satisfiability problems for propositional calculi. **(80m:03025)**

Lischke, Gerhard Complexity measures defined by Mazurkiewicz-algorithms. **(80d:68054)**

See also **Berg, Eugen Peter, (80f:68041)**

Morita, Kenichi (*with* Umeo, Hiroshi; Sugata, Kazuhiro) Computational complexity of $L(m, n)$ tape-bounded two-dimensional Turing machines. **(80f:68060)**

Paul, Wolfgang J. ★Komplexitätstheorie. **(80c:68033)**

Pippenger, Nicholas (*with* Fischer, Michael J.) Relations among complexity measures. **(80f:68052)**

Pulleyblank, W. R. A note on graphs spanned by Eulerian graphs. **(80m:68041)**

Reckhow, Robert A. *See* **Cook, Stephen A., (80e:03007)**

Sarkisjan, G. Z. Effective computability of arithmetic predicates and functions on the basis of schemes of functional elements. (Russian. Armenian and English summaries) **(80a:68047)**

Schaefer, Thomas J. The complexity of satisfiability problems. **(80d:68058)**

Selman, Alan L. *See* **Baker, Theodore P., (80g:68052)**

Sugata, Kazuhiro *See* **Morita, Kenichi; et al., (80f:68060)**

Umeo, Hiroshi *See* **Morita, Kenichi; et al., (80f:68060)**

Verbeek, R. (*with* Weihrauch, K.) Data representation and computational complexity. **(80j:68035)**

Weihrauch, K. *See* **Verbeek, R., (80j:68035)**

Wiehagen, Rolf Characterization problems in the theory of inductive inference. **(80e:03044)**

Yao, F. Frances Graph 2-isomorphism is NP-complete. **(80j:68037)**

Žák, Stanislav A Turing machine space hierarchy. **(80i:68040)**

03D20 Recursive functions and relations, subrecursive hierarchies

Bel'tjukov, A. P. Small classes based on bounded recursion. (Russian) **80m:03076**

Berezin, S. A. Maximal subalgebras of algebras of recursive functions. (Russian. English summary) **80d:03039**

Calude, Cristian (*with* Fântâneanu, Brânduşa) On recursive, non-primitive recursive functions. **80b:03052**

(*with* Marcus, Solomon; Ţevy, Ionel) The first example of a recursive function which is not primitive recursive. (French summary) **80i:03053**

Fântâneanu, Brânduşa *See* **Calude, Cristian, 80b:03052**

Georgieva, Nadejda An extension of the decidable class of equations considered by Goodstein and Lee. **80b:03053**

Goetze, Bernhard *See* **Klette, Reinhard, 80e:03043**

Hafner, I. Regressive recursion. **80g:03039**

Harrow, Keith Equivalence of some hierarchies of primitive recursive functions. **80k:03039**

Klette, Reinhard (*with* Goetze, Bernhard) Ein Normalformentheorem für Σ_2-Funktionen. (English and Russian summaries) **80e:03043**

Korol'kov, Ju. D. Families of general recursive functions with a finite number of limit points. (Russian) **80k:03040**

Kozen, Dexter Indexing of subrecursive classes. **80d:03040**

Lewis, Forbes D. On unsolvability in subrecursive classes of predicates. **80h:03060**

Marčenkov, S. S. The quasi-Peano property of recursive functions. (Russian) **80j:03054**

Marcus, Solomon *See* **Calude, Cristian; et al., 80i:03053**

Shay, Margaret (*with* Young, Paul) Characterizing the orders changed by program translators. **80a:03053**

Ţevy, Ionel *See* **Calude, Cristian; et al., 80i:03053**

Wiehagen, Rolf Characterization problems in the theory of inductive inference. **80e:03044**

Young, Paul *See* **Shay, Margaret, 80a:03053**

Secondary classifications:

Baker, Theodore P. (*with* Selman, Alan L.) A second step toward the polynomial hierarchy. **(80g:68052)**
Case, John (*with* Smith, Carl) Anomaly hierarchies of mechanized inductive inference. **(80d:68047)**
Friedman, Harvey Classically and intuitionistically provably recursive functions. **(80b:03093)**
Selman, Alan L. *See* **Baker, Theodore P., (80g:68052)**
Smith, Carl *See* **Case, John, (80d:68047)**
Validov, F. I. Minimal numerations of families of general recursive functions. (Russian) **(80f:03046)**
Žukov, S. A. Some asymptotic estimates of the complexity of partial recursive functions. (Russian) **(80f:03043)**

03D25 Recursively enumerable sets and degrees

Daley, Robert P. On the simplicity of busy beaver sets. **80h:03061**
Dëgtev, A. N. Decidability of the ∀∃-theory of a certain factor-lattice of recursively enumerable sets. (Russian) **80j:03055**
m-degrees of supersets of simple sets. (Russian) **80h:03062**
Herowitz, Bruce M. Sets completely creative via recursive permutations. **80c:03043**
Johnson, Nancy Classifications of generalized index sets of open classes. **80h:03063**
Kobuev, G. N. tt-degrees of recursively enumerable Turing degrees. (Russian) **80e:03045b**
The semilattice of tt-degrees. (Russian. Georgian and English summaries) **80e:03045a**
Lachlan, Alistair H. Bounding minimal pairs. **80k:03041**
Lavrov, I. A. Retracts of Post's numbering and effectivization of quantifiers. **80k:03042**
Omanadze, R. Š. Some generalizations of the concept of productivity of a set. (Russian) **80e:03046**
Pljasunov, A. V. Splinters and Turing degrees. (Russian) **80g:03040**
Prank, R. Congruence relations in the lattice of recursively enumerable sets. (Russian. Estonian and English summaries) **80g:03041**
Schade, Wolfgang Indexmengen rekursiver reeller Zahlen. **80d:03041**
Staiger, Ludwig (*with* Wagner, Klaus) Rekursive Folgenmengen. I. **80f:03044**
Wagner, Klaus *See* **Staiger, Ludwig, 80f:03044**

Secondary classifications:

Lerman, Manuel Lattices of α-recursively enumerable sets. **(80e:03054)**

03D30 Degrees and reducibilities

Belegradek, O. V. m-degrees of the word problem. (Russian) **80c:03044**
Börger, Egon A new general approach to the theory of the many-one equivalence of decision problems for algorithmic systems. **80f:03045**
Chen, Keh Hsun Recursive well-founded orderings. **80e:03047**
Dëgtev, A. N. Three theorems on tt-degrees. (Russian) **80j:03056**
Hebeisen, Friedrich Charakterisierung der Aufzählungsreduzierbarkeit. **80e:03048**
Masstheoretische Ergebnisse für WT-Grade. **80e:03049**
Über Halbordnungen von WT-Graden in e-Graden. **80j:03057**
Hodžajanc, M. Ju. Structure of e-degrees. (Russian. Armenian summary) **80k:03043**
Jockusch, Carl G., Jr. (*with* Posner, David B.) Double jumps of minimal degrees. **80d:03042**
Li, Kuo Wei Type two partial degrees. **80d:03043**
Mansfield, Richard A footnote to a theorem of Solovay on recursive encodability. **80h:03064**
McLaughlin, T. G. Retraceable homogeneous sets. **80f:03054**
Posner, David B. *See* **Jockusch, Carl G., Jr., 80d:03042**
Richter, Linda Jean On automorphisms of the degrees that preserve jumps. **80h:03065**
Sanchis, Luis E. Reducibilities in two models for combinatory logic. **80k:03044**

Secondary classifications:

Maass, Wolfgang High α-recursively enumerable degrees. **(80b:03059)**
Poljakov, E. A. (*with* Rozinas, M. G.) Correlations between different forms of relative computability of functions. (Russian) **(80e:68135)**
Rozinas, M. G. *See* **Poljakov, E. A., (80e:68135)**

03D35 Undecidability and degrees of sets of sentences

Baxter, Lewis D. The undecidability of the third-order dyadic unification problem. **80m:03077**
Börger, Egon Bemerkung zu Gurevich's Arbeit über das Entscheidungsproblem für Standardklassen. **80a:03054b**
Buszkowski, Wojciech Undecidability of the theory of lattice-orderable groups. **80m:03078**
Nakamura, Akira *See* **Ono, Hiroakira, 80k:03045**
Norgėla, S. Herbrand's deduction-search strategies in predicate calculus. I. (Russian. Lithuanian and English summaries) **80e:03050**
Ono, Hiroakira (*with* Nakamura, Akira) Undecidability of the first-order arithmetic $A[P(x), 2x, x+1]$. **80k:03045**
Roman'kov, V. A. Universal theory of nilpotent groups. (Russian) **80j:03058**
Rozenblat, B. V. Positive theories of free inverse semigroups. (Russian) **80m:03079**
Thomas, Wolfgang The theory of successor with an extra predicate. **80h:03054**
Wirsing, Martin Kleine unentscheidbare Klassen der Prädikatenlogik mit Identität und Funktionszeichen. **80a:03054a**
Zamjatin, A. P. A nonabelian variety of groups has an undecidable elementary theory. (Russian) **80c:03045**

Secondary classifications:

Buszkowski, Wojciech Undecidability of some logical extensions of Ajdukiewicz-Lambek calculus. **(80f:03029)**
Denef, J. (*with* Lipshitz, L.) Diophantine sets over some rings of algebraic integers. **(80a:12030)**
Herrmann, Eberhard Über Lindenbaumfunktionen von $\aleph_0$-kategorischen Theorien endlicher Signatur. (Russian, English and French summaries) **(80d:03028)**
Jacob, Gérard Séries rationnelles. Problèmes de finitude et de décidabilité. **(80d:68067)**
Lipshitz, L. *See* **Denef, J., (80a:12030)**
Prestel, Alexander Entscheidbarkeit mathematischer Theorien. **(80j:03001)**
Ryan, William Gödel's second incompleteness theorem for general recursive arithmetic. **(80b:03092)**
Schmerl, James H. A decidable $\aleph_0$-categorical theory with a nonrecursive Ryll-Nardzewski function. **(80g:03031)**
Schönfeld, Wolfgang An undecidability result for relation algebras. **(80f:03074)**
Smikun, L. B. The degree of unsolvability of algorithmic problems connected with automata operation on groups. (Russian. English summary) **(80d:03037)**

03D40 Word problems, etc. [See also 06B25, 08A50, 20F10.]

Avenhaus, J. (*with* Madlener, K.) Subrekursive Komplexität bei Gruppen. II. Der Einbettungssatz von Higman für entscheidbare Gruppen. (English summary) **80d:03044**
(*with* Madlener, K.) Algorithmische Probleme bei Einrelatorgruppen und ihre Komplexität. **80b:03055**
Madlener, K. *See* **Avenhaus, J., 80b:03055** *and* **Avenhaus, J., 80d:03044**
Oganesjan, G. U. A class of semigroups with a solvable word problem. (Russian) **80i:03055**
Semenov, A. L. Some algorithmic problems for systems of algorithmic algebras. (Russian) **80a:03055**
Stillwell, John C. Unsolvability of the knot problem for surface complexes. **80j:03060**

Secondary classifications:

Holland, W. Charles (*with* McCleary, Stephen H.) Solvability of the word problem in free lattice-ordered groups. **(80f:06018)**
Kašincev, E. V. On the word problem for special semigroups. (Russian) **(80c:20080)**
Kleiman, Ju. G. Identities and some algorithmic problems in groups. (Russian) **(80b:20044)**
Kukin, G. P. Algorithmic problems for solvable Lie algebras. (Russian) **(80h:17017)**
Makanin, G. S. Identification of the rank of equations in a free semigroup. (Russian) **(80h:20084)**
McCleary, Stephen H. *See* **Holland, W. Charles, (80f:06018)**
Roman'kov, V. A. Equations in free metabelian groups. (Russian) **(80k:20040)**
Rozenblat, B. V. Positive theories of free inverse semigroups. (Russian) **(80m:03079)**

03D45 Theory of numerations, effectively presented structures

Calude, Cristian On the category of recursive languages. **80h:03056**
Fowler, Northrup, III Effective inner product spaces. **80a:03056**
Hisamiev, N. G. The periodic part of a strongly constructivizable abelian group. (Russian) **80c:03046**
Hupbach, Ulrich L. Rekursive Funktionen in mehrsortigen Peano-Algebren. (English and Russian summaries) **80g:03042**
Kričevskiĭ, R. E. Lexical enumeration of binary dictionaries. (Russian) **80a:03057**
Metakides, G. (*with* Remmel, J. B.) Recursion theory on orderings. I. A model-theoretic setting. **80m:03080**
Nogina, E. Ju. Enumerable topological spaces. (Russian) **80e:03051**
Remmel, J. B. Recursively enumerable Boolean algebras. **80e:03052**
See also **Metakides, G., 80m:03080**
Validov, F. I. Minimal numerations of families of general recursive functions. (Russian) **80f:03046**

Secondary classifications:

Gončarov, S. S. Constructive models of $\aleph_1$-categorical theories. (Russian) **(80g:03029)**
Mead, Jerud Recursive prime models for Boolean algebras. **(80j:03050)**
Wiehagen, Rolf Characterization problems in the theory of inductive inference. **(80c:03044)**

03D50 Recursive equivalence types of sets and structures, isols

Barback, J. (*with* McLaughlin, T. G.) On the intersection of regressive sets. **80f:03047**
Dekker, J. C. E. Sharply two-transitive families of permutations on an immune set. **80a:03058**
McLaughlin, T. G. *See* **Barback, J., 80f:03047**
Miheev, V. L. A hierarchy of independent ω-processions of cosimple isols. (Russian) **80e:03053**
Some remarks on isols. (Russian) **80j:03061**

Secondary classifications:

Bredlau, Carl E. Admissible sets and recursive equivalence types. **(80f:03048)**

03D55 Hierarchies

Fitting, Melvin Elementary formal systems for hyperarithmetical relations. **80a:03059**
Gerla, G. A generalization of the Erlov hierarchy. (Italian. English summary) **80j:03062**

Secondary classifications:

Baraiko, A. S. Relations between the procedure of core restrictions with effective operators and the "honest" procedure. (Russian) **(80e:68097)**
Demuth, Osvald (*with* Kryl, R.; Kučera, Antonin) The use of the theory of functions that are partial recursive relative to numerical sets in constructive mathematics. (Russian. English and Czech summaries) **(80a:03071)**
Kechris, Alexander S. AD and projective ordinals. **(80j:03069)**
On transfinite sequences of projective sets with an application to Σ^1_2 equivalence relations. **(80j:03070)**
Kiselev, A. A. The axiom of comparable choice and uniformizability of projective classes. (Russian) **(80k:03052)**
Kryl, R. *See* **Demuth, Osvald; et al., (80a:03071)**
Kučera, Antonin *See* **Demuth, Osvald; et al., (80a:03071)**
Louveau, Alain Recursivity and compactness. **(80j:03071)**
Mansfield, Richard A footnote to a theorem of Solovay on recursive encodability. **(80b:03064)**
Staiger, Ludwig (*with* Wagner, Klaus) Rekursive Folgenmengen. I. **(80f:03044)**
Wagner, Klaus *See* **Staiger, Ludwig, (80f:03044)**

03D60 Recursion theory on ordinals, admissible sets, etc.

Bredlau, Carl E. Admissible sets and recursive equivalence types. **80f:03048**
Carpenter, Amos J. For a countable admissible ordinal α, the α-recursive functions are exactly the α-definite functions. **80g:03043**
Friedman, Sy D. An introduction to β-recursion theory. **80b:03057**
Negative solutions to Post's problem. I. **80c:03047**
Jacobs, Barry E. The α-union theorem and generalized primitive recursion. **80b:03058**
α-speedable and non-α-speedable sets. **80k:03047**
α-naming and α-speedup theorems. **80k:03046**
Lerman, Manuel Lattices of α-recursively enumerable sets. **80e:03054**
On elementary theories of some lattices of α-recursively enumerable sets. **80l:03056**
Maass, Wolfgang High α-recursively enumerable degrees. **80b:03059**
Fine structure theory of the constructible universe in α- and β-recursion theory. **80g:03044**
Inadmissibility, tame r.e. sets and the admissible collapse. **80a:03060**
Normann, Dag (*with* Stoltenberg-Hansen, Viggo) A non-adequate admissible set with a good degree-structure. **80b:03060**
Set recursion. **80j:03063**
Odifreddi, Piergiorgio Recursion theory on admissible ordinals. (Italian. English summary) **80a:03061**
Shore, Richard A. On the $\forall\exists$-sentences of α-recursion theory. **80e:03055**
Some more minimal pairs of α-recursively enumerable degrees. **80b:03061**
Simpson, Stephen G. Basis theorems and countable admissible ordinals. **80d:03045**
Short course on admissible recursion theory. **80f:03049**
Skordev, D. A normal form theorem for recursive operators in iterative combinatory spaces. **80b:03062**
Stoltenberg-Hansen, Viggo Weakly inadmissible recursion theory. **80e:03056**
See also **Normann, Dag, 80b:03060**
Yang, Dong Ping The existence of nonmitotic α-recursively enumerable sets. (Chinese. English summary) **80h:03066**

Secondary classifications:

Bruce, Kim B. (*with* Keisler, H. Jerome) $L_A(\exists)$. **(80f:03037)**
Keisler, H. Jerome *See* **Bruce, Kim B., (80f:03037)**

03D65 Higher-type recursion theory

Bergstra, Jan The continuous functionals and ^2E. **80f:03050**
Freivalds, R. Effective operations and limiting computable functionals. (Russian) **80c:03048**
Girard, J. Y. Functionals and ordinoids. **80h:03067**
Hauck, Jürgen Rekursive Funktionale und der Fixpunktsatz von Banach. (Russian, English and French summaries) **80e:03057**
Hyland, J. M. E. The intrinsic recursion theory on the countable or continuous functionals. **80g:03045**
Kleene, S. C. Recursive functionals and quantifiers of finite types revisited. I. **80k:03048**
Kolaitis, Phokion G. On recursion in E and semi-Spector classes. **80j:03064b**
Recursion in a quantifier vs. elementary induction. **80j:03064a**
Moldestad, Johan On the role of the successor function in recursion theory. **80g:03046**
Normann, Dag A continuous functional with noncollapsing hierarchy. **80b:03063**
Wainer, Stanley S. The 1-section of a nonnormal type-2 object. **80j:03065**

Secondary classifications:

Li, Kuo Wei Type two partial degrees. **(80d:03043)**
Normann, Dag Set recursion. **(80j:03063)**
Vogel, Helmut Eine beweistheoretische Anwendung partieller stetiger Funktionale. **(80b:03087)**
***B*-valued analysis and nonstandard analysis** ★ *B*-valued analysis and nonstandard analysis. (Japanese) **(80b:03002)**
Kyoto *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**
Nonstandard analysis *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**
Symposium:
B-Valued Analysis and Nonstandard Analysis *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**

03D70 Inductive definability

Fenstad, Jens Erik On the foundation of general recursion theory: computations versus inductive definability. **80g:03047**
Fukuyama, Masaru On positive Σ inductive definitions. **80g:03048**
Grassin, Jacques Définitions inductives monotones sur le continu, dont les composantes sont dénombrables. (English summary) **80c:03049**

Secondary classifications:

Hyland, J. M. E. The intrinsic recursion theory on the countable or continuous functionals. **(80g:03045)**
Kolaitis, Phokion G. On recursion in E and semi-Spector classes. **(80j:03064b)**
Recursion in a quantifier vs. elementary induction. **(80j:03064a)**
Schwartz, Dietrich Kanonische Abbildungen und Eilenberg-Maschinen. **(80c:03042)**

03D75 Abstract and axiomatic recursion theory

Ferrari, P. L. (*with* Longo, G) Axiomatic theory of enumeration: a note on the axiom of extensionality. **80k:03049**
Georgieva, N. V. On some McCarthy equivalents. (Russian) **80j:03066**
Ivanov, Ljubomir L. Natural combinatory spaces. (Russian) **80m:03081**
Longo, G *See* **Ferrari, P. L., 80k:03049**
Schwartz, Dietrich Beitrag zur algebraischen Rekursionstheorie. **80m:03082**
Skordev, D. The first recursion theorem for iterative combinatory spaces. **80g:03049**
Thomas, William J. A simple generalization of Turing computability. **80k:03068**

Secondary classifications:

Kolaitis, Phokion G. On recursion in E and semi-Spector classes. **(80j:03064b)**
Recursion in a quantifier vs. elementary induction. **(80j:03064a)**
Metakides, G. (*with* Remmel, J. B.) Recursion theory on orderings. I. A model-theoretic setting. **(80m:03080)**
Remmel, J. B. *See* **Metakides, G., (80m:03080)**

03D80 Applications

Secondary classifications:

Lascar, Daniel Caractère effectif des théorèmes d'approximation d'Artin. (English summary) **(80c:14006)**
Millar, Terrence S. Foundations of recursive model theory. **(80a:03051)**

03D99 None of the above, but in this section

Secondary classifications:

Bergstra, Jan Recursion theory on processes. **(80f:68057)**

03Exx Set theory [See also 04–XX.]

Comfort, W. Wistar Deciding some undecidable topological statements. **80k:03050**
Jech, Thomas ★Set theory. **80a:03062**
Levin, Margarita R. *See* **Levin, Michael E., 80a:03063**
Levin, Michael E. (*with* Levin, Margarita R.) The independence results of set theory: an informal exposition. **80a:03063**

Secondary classifications:

Lévy, Azriel ★Basic set theory. **(80k:04001)**
(Müller, Gert H.) *See* **Higher set theory, (80a:03005)**
(Scott, Dana S.) *See* **Higher set theory, (80a:03005)**
Conference:
Higher Set Theory *See* **Higher set theory, (80a:03005)**
Higher set theory ★Higher set theory. **(80a:03005)**
Oberwolfach *See* **Higher set theory, (80a:03005)**
Set theory *See* **Higher set theory, (80a:03005)**

03E05 Combinatorial set theory

Baumgartner, James E. (*with* Taylor, Alan; Wagon, Stanley) Ideals on uncountable cardinals. **80e:03058**
(*with* Galvin, Fred) Generalized Erdős cardinals and 0^*. **80f:03051**
Blass, Andreas A model-theoretic view of some special ultrafilters. **80d:03046**
Cohen, Paul E. Partition generation of scales. **80k:03051**
Devlin, Keith J. Variations on $\diamondsuit$. **80c:03059**
Galvin, Fred *See* **Baumgartner, James E., 80f:03051**
Ketonen, Jussi Open problems in the theory of ultrafilters. **80l:03057**
Kucia, A. On $P(m)$-ultrafilters on N. **80d:03047**
Kurepa, Đuro Fixpoint considerations and models of set theories. **80j:03067**
Laver, Richard A saturation property on ideals. **80b:03064**
Magidor, Menachem On the existence of nonregular ultrafilters and the cardinality of ultrapowers. **80j:03068**
di Prisco, Carlos A. (*with* Zwicker, William) A remark on Part*(κ, λ). (Spanish summary) **80d:03048**
Steffens, Karsten Regressive functions and stationary sets. **80f:03052**
Taylor, Alan *See* **Baumgartner, James E.; et al., 80e:03058**
Wagon, Stanley *See* **Baumgartner, James E.; et al., 80e:03058**
Zwicker, William *See* **di Prisco, Carlos A., 80d:03048**

Secondary classifications:

Cohen, Paul E. *P*-points in random universes. **(80m:54036)**
Jech, Thomas (*with* Prikry, Karel) Ideals over uncountable sets: application of almost disjoint functions and generic ultrapowers. **(80f:03059)**
Kanamori, Akihiro On Vopěnka's and related principles. **(80e:03063)**
Miller, Arnold W. There are no Q-points in Laver's model for the Borel conjecture. **(80b:03071)**
Pimus, A. G. Collections of pairwise incomparable linear orders of a given degree of dispersal. (Russian) **(80m:06001)**
Prikry, Karel *See* **Jech, Thomas, (80f:03059)**
Wage, Michael L. Almost disjoint sets and Martin's axiom. **(80j:03079)**

03E10 Ordinal and cardinal arithmetic

Larson, Jean A. An independence result for pinning for ordinals. **80e:03059**

Secondary classifications:

Pincus, David A note on the cardinal factorial. **(80e:03060)**
Sonenberg, E. A. Nonstandard models of ordinal arithmetics. **(80h:03051)**

03E15 Descriptive set theory

Becker, Howard Partially playful universes. **80g:03050**
Burgess, John P. Two selection theorems. **80h:03069**
Effective enumeration of classes in a Σ^1_1 equivalence relation. **80f:03053**
Bunch, Douglas R. Capacitability and determinacy. **80g:03051**
David, René A π^1_2 singleton with no sharp in a generic extension of $L^{\mathfrak{s}}$. **80a:03064**
Harrington, Leo A. Analytic determinacy and $0^\sharp$. **80b:03065**
Hrbáček, Karel On the complexity of analytic sets. **80b:03066**
Kechris, Alexander S. Classifying projective-like hierarchies. **80m:03083**
AD and projective ordinals. **80j:03069**
Forcing in analysis. **80c:03051**
On transfinite sequences of projective sets with an application to Σ^1_2 equivalence relations. **80j:03070**
The perfect set theorem and definable wellorderings of the continuum. **80b:03067**
Kiselev, A. A. The axiom of comparable choice and uniformizability of projective classes. (Russian) **80k:03052**
Louveau, Alain Une propriété de petitesse des filtres sur ω. **80b:03068**
Recursivity and compactness. **80j:03071**
Notions élémentaires de théorie descriptive effective. **80f:03054**
Srebrny, Marian Singular cardinals and analytic games. **80j:03072**
Stern, Jacques Suites transfinies d'ensembles boréliens. (English summary) **80b:03069**
Van Wesep, Robert Wadge degrees and descriptive set theory. **80i:03058**

Secondary classifications:

Cowles, John The relative expressive power of some logics extending first-order logic. **(80f:03039)**
Dellacherie, Claude Correction à: "Un crible généralisé" (Séminaire de Probabilités, VII (Univ. Strasbourg, Strasbourg, année universitaire 1971–1972), pp. 33–35, Lecture Notes in Math., Vol. 321, Springer, Berlin, 1973). **(80e:54052)**
Filippov, V. P. *See* **Kozlova, Z. I., (80e:54053a)** *and* **Kozlova, Z. I., (80e:54053b)**
Fleissner, William G. (*with* Kunen, Kenneth) Barely Baire spaces. **(80f:54099)**
Kanovei, V. G. The nonemptiness of classes in axiomatic set theory. (Russian) **(80a:03067)**
Kozlova, Z. I. (*with* Filippov, V. P.) Classes of projective sets of certain topological spaces of uncountable weight. I. (Russian) **(80e:54053a)**
(*with* Filippov, V. P.) Classes of projective sets of certain topological spaces of uncountable weight. II. (Russian) **(80e:54053b)**
Kunen, Kenneth *See* **Fleissner, William G., (80f:54009)**
Miller, Douglas E. An application of invariant sets to global definability. **(80m:03072)**
Simpson, Stephen G. Basis theorems and countable admissible ordinals. **(80d:03045)**
Solovay, Robert M. A Δ^1_3 coding of the subsets of ω_ω. **(80g:03054)**

03E20 Other classical set theory

03E25 Axiom of choice and related propositions

Felgner, U. (*with* Flannagan, T. B.) Wellordered subclasses of proper classes. **80b:03070**
Flannagan, T. B. *See* **Felgner, U., 80b:03070**
Hickman, John L. Dedekind-finite fields. **80d:03049**
Howard, Paul E. (*with* Rubin, Arthur L.; Rubin, Jean E.) Independence results for class forms of the axiom of choice. **80h:03070**
Lembcke, Jörn Two extension theorems effectively equivalent to the axiom of choice. **80j:03073**
Pelc, Andrzej On some weak forms of the axiom of choice in set theory. (Russian summary) **80k:03053**
Pincus, David A note on the cardinal factorial. **80e:03060**
Rubin, Arthur L. *See* **Howard, Paul E.; et al., 80h:03070**
Rubin, Jean E. *See* **Howard, Paul E.; et al., 80h:03070**
Rudin, Mary Ellen Hereditary normality and Souslin lines. **80b:03071**
Schrijver, Alexander The dependence of some logical axioms on disjoint transversals and linked systems. **80a:03065**

Secondary classifications:

Abian, Alexander A simplified version of Fraenkel-Mostowski model for the independence of the axiom of choice. **(80k:03054)**
Cocchiarella, Nino B. The theory of homogeneous simple types as a second-order logic. **(80k:03058)**
van Dalen, D. (*with* Doets, H. C.; de Swart, H. C. M.) ★Sets: naïve, axiomatic and applied. **(80b:04001)**
Doets, H. C. *See* **van Dalen, D.; et al., (80b:04001)**
Kurepa, Đuro Fixpoint considerations and models of set theories. **(80j:03067)**
Rosser, J. Barkley ★Logic for mathematicians. **(80b:03001)**
de Swart, H. C. M. *See* **van Dalen, D.; et al., (80b:04001)**

03E30 Axiomatics of classical set theory and its fragments

Abian, Alexander A preliminary to forcing in set theory. On the standard and minimal standard model axioms of ZF. **80c:03052**
de Alcantara, L. P. Les systèmes BG^0_n. **80f:03055**
Boffa, M. On the axiomatization of NF. **80b:03072**
Bridges, Douglas S. A note on Morse's lambda-notation in set theory. **80b:03073**
Čankvetadze, O. E. On the construction of E-calculi. (Russian. Georgian and English summaries) **80i:03059**
Chuaqui, Rolando Bernays' class theory. **80d:03050**
Feferman, Solomon Generalizing set-theoretical model theory and an analogue theory on admissible sets. **80m:03084**
Friedman, Harvey A proof of foundation from axioms of cumulation. **80m:03085**
Kühnrich, Martin Superclasses in a finite extension of Zermelo set theory. **80f:03056**
Lolli, Gabriel (*with* Marek, Wiktor) On elementary theories of v. Neumann's levels. (Italian summary) **80j:03074**
Marek, Wiktor *See* **Lolli, Gabriel, 80j:03074**
Nash-Williams, C. St. J. A. Should axiomatic set theory be translated into graph theory? **80b:03074**
Quine, Willard Van Orman ★Mengenlehre und ihre Logik. **80b:03075**
Rose, Alan A three-valued model for set theory. **80d:03051**

Secondary classifications:

Christian, Curt Eine Definition des geordneten Paares von Klassen. **(80c:04001)**
Lake, John The approaches to set theory. **(80i:04002)**
Rosser, J. Barkley ★Logic for mathematicians. **(80b:03001)**

03E35 Consistency and independence results

Abian, Alexander A simplified version of Fraenkel-Mostowski model for the independence of the axiom of choice. **80k:03054**
Aoe, Hitoshi On the Whitehead problem. **80a:03066**
Baumgartner, James E. Independence proofs and combinatorics. **80b:03076**
Briggs, James M. (*with* Schaffter, Thomas) Measure and cardinality. **80j:03075**
Bull, Everett L., Jr. (*with* Kleinberg, E. M.) A consistent consequence of AD. **80m:03086**
Chuaqui, Rolando *See* **Corrada, M., 80d:03052**
Corrada, M. (*with* Chuaqui, Rolando) Internal models for any finite subset of the axioms for the impredicative theory of classes. **80d:03052**
Crvenković, Siniša *See* **Grulović, Mil'an, 80e:03061**
Devlin, Keith J. $\aleph_1$-trees. **80c:03053**
Iterated Souslin forcing, the principles $\diamondsuit(E)$ and a generalisation of the axiom SAD. **80k:03055**
Remark on a theorem of D. H. Fremlin concerning K-analytic Hausdorff spaces. **80j:03076**
Gogol, Daniel Sentences with three quantifiers are decidable in set theory. **80j:03077**
Grulović, Mil'an (*with* Crvenković, Siniša) On the consistency and independence of some axioms of set theory. (Serbo-Croatian. English summary) **80e:03061**
Hickman, John L. The ideal of orderable subsets of a set. **80f:03057**
Kanoveĭ, V. G. The nonemptiness of classes in axiomatic set theory. (Russian) **80a:03067**
A consequence of Martin's axiom. (Russian) **80m:03087**
Kleinberg, E. M. *See* **Bull, Everett L., Jr., 80m:03086**
Kunen, Kenneth Saturated ideals. **80a:03068**
Levin, Margarita R. *See* **Levin, Michael E., 80g:03052**
Levin, Michael E. (*with* Levin, Margarita R.) Errata: "The independence results of set theory: an informal exposition" (Synthese 38 (1978), no. 1, 1–34). **80g:03052**
Miller, Arnold W. There are no Q-points in Laver's model for the Borel conjecture. **80b:03071**
Roitman, Judy Paracompact box products in forcing extensions. **80j:03078**
Schaffter, Thomas *See* **Briggs, James M., 80j:03075**
Stern, Jacques Partitions of the real line into $\aleph_1$ closed sets. **80f:03058**
Talagrand, Michel Est-ce que l^∞ est un espace mesurable? (English summary) **80k:03056**
Vahdati, A. N. Forcing's method and consistency problems. **80b:03077**

Secondary classifications:

Cocchiarella, Nino B. The theory of homogeneous simple types as a second-order logic. **(80k:03058)**
Cohen, Paul E. Partition generation of scales. **(80k:03051)**
Davies, Peter Nonperfect spaces with point-countable bases. **(80j:54024)**
Juhász, I. (*with* Weiss, William) On a problem of Sikorski. **(80g:54006)**
Larson, Jean A. An independence result for pinning for ordinals. **(80e:03059)**
Laver, Richard A saturation property on ideals. **(80b:03064)**
Magidor, Menachem On the existence of nonregular ultrafilters and the cardinality of ultrapowers. **(80j:03068)**
Miller, Arnold W. On the length of Borel hierarchies. **(80m:04003)**
Morgenstern, Carl F. On the ordering of certain large cardinals. **(80i:03061)**
Roitman, Judy More paracompact box products. **(80i:54006)**
Rudin, Mary Ellen Pixley-Roy and the Souslin line. **(80c:54030)**
Solovay, Robert M. The independence of DC from AD. **(80e:03065)**
Väänänen, Jouko Two axioms of set theory with applications to logic. **(80e:03067)**
Weiss, William *See* **Juhász, I., (80g:54006)**

03E40 Other aspects of forcing and Boolean-valued models

Alkor, C. Forcing in Ackermanns Mengenlehre. **80m:03088**
Anapolitanos, D. A. Absolute indiscernibles and standard models of ZFC. **80d:03053**
Bukovský, Lev Cogeneric extensions. **80e:03062**
Dehornoy, Patrick Iterated ultrapowers and Prikry forcing. **80k:03057**
Krapčatov, N. M. Existence of ε-random numbers. (Russian) **80c:03054**

Secondary classifications:

Cohen, Paul E. *P*-points in random universes. **(80m:54036)**
Kanovei, V. G. Expressibility of a forcing formula in analysis. (Russian. English summary) **(80j:03085)**
Štěpánek, Petr Cardinal collapsing and ordinal definability. **(80b:03080a)**
Takeuti, Gaisi A transfer principle in harmonic analysis. **(80b:03077)**

03E45 Constructibility, ordinal definability, and related notions

Chong, C. T. Σ_n-cofinalities of J_α. **80b:03078**
Chuaqui, Rolando *See* **Marshall, M. V., 80d:03054**
Friedman, Harvey Categoricity with respect to ordinals. **80m:03089**
Gloede, Klaus Hierarchies of sets definable by means of infinitary languages. **80g:03053**
Hájek, Petr Some results on degrees of constructibility. **80d:03055b**
Kuźga, Wiesław Degrees of non-definability of the Sacks model. **80c:03055**
Marshall, M. V. (*with* Chuaqui, Rolando) Constructibility in the impredicative theory of classes. **80d:03054**
Roguski, Stanisław (*with* Zarach, Andrzej) Inner models, ordinal definability and the axiom of power set. **80b:03079**
Štěpánek, Petr Cardinals in the inner model HOD. **80b:03080b**
Cardinal collapsing and ordinal definability. **80b:03080a**
Truss, J. A note on increasing sequences of constructibility degrees. **80d:03055a**
Zarach, Andrzej *See* **Roguski, Stanisław, 80b:03079**

Secondary classifications:

Eklof, Paul C. (*with* Huber, Martin) Abelian group extensions and the axiom of constructibility. **(80m:20043)**
Huber, Martin *See* **Eklof, Paul C., (80m:20043)**
Kiselev, A. A. The axiom of comparable choice and uniformizability of projective classes. (Russian) **(80k:03052)**
Maass, Wolfgang Fine structure theory of the constructible universe in α- and β-recursion theory. **(80g:03044)**
Shelah, Saharon A Banach space with few operators. **(80b:46033)**

03E50 Continuum hypothesis and Martin's axiom [See also 54A25.]

Devlin, Keith J. Martin's axiom versus the continuum hypothesis. **80b:03081**
Jech, Thomas (*with* Prikry, Karel) Ideals over uncountable sets: application of almost disjoint functions and generic ultrapowers. **80f:03059**
Młoduszewski, Jerzy Suslin's problem and Martin's axiom. (Polish) **80b:03082**
Prikry, Karel *See* **Jech, Thomas, 80f:03059**
Szymański, Andrzej Some Baire category type theorems for $U(\omega_1)$. **80i:03060**
Wage, Michael L. Almost disjoint sets and Martin's axiom. **80j:03079**

Secondary classifications:

Baškirov, A. I. Maximal almost disjoint systems and Franklin bicompacta. (Russian) **(80a:54032)**
Blass, Andreas A model-theoretic view of some special ultrafilters. **(80d:03046)**
(*with* Weiss, Gary) A characterization and sum decomposition for operator ideals. **(80a:47071)**
Devlin, Keith J. Remark on a theorem of D. H. Fremlin concerning *K*-analytic Hausdorff spaces. **(80j:03076)**
Ishii, Kiyoshi Non-Greek, nonstandard objects in mathematics. **(80d:01026)**
Juhász, I. (*with* Weiss, William) Martin's axiom and normality. **(80a:54028)**
Kanovei, V. G. A consequence of Martin's axiom. (Russian) **(80m:03087)**
Larson, Jean A. An independence result for pinning for ordinals. **(80e:03059)**
Mauldin, R. Daniel Some effects of set-theoretical assumptions in measure theory. **(80i:28021)**
Młoduszewski, Jerzy On composants of $\beta R - R$. **(80g:54031)**
Rudin, Mary Ellen The undecidability of the existence of a perfectly normal nonmetrizable manifold. **(80j:54014)**
Takeuti, Gaisi Gödel numbers of product spaces. **(80e:03066)**
Weiss, Gary *See* **Blass, Andreas, (80a:47071)**
Weiss, William *See* **Juhász, I., (80a:54028)**

03E55 Large cardinals

Ben-David, Shai On Shelah's compactness of cardinals. **80f:03060a**
Correction to: "On Shelah's compactness of cardinals" (Israel J. Math. **31** (1978), no. 1, 34–56). **80f:03060b**
Bull, Everett L., Jr. Successive large cardinals. **80f:03061**
Kanamori, Akihiro (*with* Magidor, Menachem) The evolution of large cardinal axioms in set theory. **80b:03083**
On Vopěnka's and related principles. **80e:03063**
See also **Solovay, Robert M.; et al., 80b:03072**
Kleinberg, E. M. A combinatorial characterization of normal *M*-ultrafilters. **80e:03064**
The equiconsistency of two large cardinal axioms. **80d:03056**
Magidor, Menachem *See* **Kanamori, Akihiro, 80b:03083**
Mathias, A. R. D. $0^\#$ and the *p*-point problem. **80f:03062**
McAloon, Kenneth A combinatorial characterization of inaccessible cardinals. **80b:03084**
Mitchell, William Ramsey cardinals and constructibility. **80f:03063**
Morgenstern, Carl F. On the ordering of certain large cardinals. **80i:03061**
Reinhardt, William N. *See* **Solovay, Robert M.; et al., 80b:03072**
Solovay, Robert M. (*with* Reinhardt, William N.; Kanamori, Akihiro) Strong axioms of infinity and elementary embeddings. **80b:03072**
Stern, Jacques Le problème des cardinaux singuliers (d'après R. B. Jensen et J. Silver). **80b:03085**
Tauts, A. Multivalence of the axiom of normal functions. (Russian. Estonian and German summaries) **80b:03086**

Secondary classifications:

Bernhardt, Klaus Abschliessbarkeit von Kripke-Semantiken. (Russian, English and French summaries) **(80e:03039)**
Henle, James M. γ-Ramsey and γ-ineffable cardinals. **(80a:04004)**
Ketonen, Jussi Open problems in the theory of ultrafilters. **(80i:03057)**
Kunen, Kenneth Saturated ideals. **(80a:03068)**
Laver, Richard A saturation property on ideals. **(80b:03064)**
Magidor, Menachem On the existence of nonregular ultrafilters and the cardinality of ultrapowers. **(80j:03068)**
di Prisco, Carlos A. (*with* Zwicker, William) A remark on Part*(κ, λ). (Spanish summary) **(80d:03048)**
Zwicker, William *See* **di Prisco, Carlos A., (80d:03048)**

03E60 Axiom of determinacy and other axioms which contradict the axiom of choice

Di Prisco, C. A. (*with* Henle, James M.) On the compactness of $\aleph_1$ and $\aleph_2$. **80c:03056**
Henle, James M. *See* **Di Prisco, C. A., 80c:03056**
Solovay, Robert M. The independence of DC from AD. **80e:03065**
A Δ^1_3 coding of the subsets of ω_ω. **80g:03054**
Tall, Franklin D. Applications of a generalized Martin's axiom. **80b:03087**

Secondary classifications:

Becker, Howard Partially playful universes. **(80g:03050)**
Bull, Everett L., Jr. Successive large cardinals. **(80f:03061)**
(*with* Kleinberg, E. M.) A consistent consequence of AD. **(80m:03086)**
Busch, Douglas R. Capacitability and determinacy. **(80g:03051)**
van Dalen, D. (*with* Doets, H. C.; de Swart, H. C. M.) ★Sets: naïve, axiomatic and applied. **(80b:04001)**
Doets, H. C. *See* **van Dalen, D.; et al., (80b:04001)**
Harrington, Leo A. Analytic determinacy and $0^\sharp$. **(80b:03065)**
Henle, James M. γ-Ramsey and γ-ineffable cardinals. **(80a:04004)**
Kleinberg, E. M. *See* **Bull, Everett L., Jr., (80m:03086)**
Louveau, Alain Une propriété de petitesse des filtres sur ω. **(80b:03068)**
de Swart, H. C. M. *See* **van Dalen, D.; et al., (80b:04001)**
Van Wesep, Robert Wadge degrees and descriptive set theory. **(80i:03058)**

03E65 Other hypotheses and axioms

Takeuti, Gaisi Gödel numbers of product spaces. **80e:03066**
Väänänen, Jouko Two axioms of set theory with applications to logic. **80e:03067**

Secondary classifications:

Devlin, Keith J. Martin's axiom versus the continuum hypothesis. **(80b:03081)**
Młoduszewski, Jerzy Suslin's problem and Martin's axiom. (Polish) **(80b:03082)**

03E70 Nonclassical and second-order set theories

Asenjo, F. G. Leśniewski's work and nonclassical set theories. **80a:03069**
Cocchiarella, Nino B. The theory of homogeneous simple types as a second-order logic. **80k:03058**
Crabbé, Marcel Ambiguity and stratification. **80h:03073**
Fadini, Angelo Indecisive sets and their algebra. (Italian. English summary) **80g:03055**
Goodman, N. (*with* Myhill, J.) Choice implies excluded middle. **80e:03068**
(Leśniewski, Stanisław) *See* **Asenjo, F. G., 80a:03069**
Myhill, J. *See* **Goodman, N., 80e:03068**
Pétry, André On the typed properties in Quine's "New Foundations". **80b:03074**

Secondary classifications:

Aczel, Peter The type theoretic interpretation of constructive set theory. **(80f:03068)**
Friedman, Harvey Classically and intuitionistically provably recursive functions. **(80b:03093)**
Rousseau, Christiane Nombres réels et complexes dans les topos spatiaux. **(80c:18004)**

03E72 Fuzzy sets [See also 54A40, 94D05.]

Chu, A. T. W. (*with* Kalaba, Robert E.; Spingarn, K.) A comparison of two methods for determining the weights of belonging to fuzzy sets. **80i:03062**
Dubois, Didier (*with* Prade, Henri) Fuzzy real algebra: some results. **80k:03075**
Gottwald, S. Konstruktionen abgeschlossener Bereiche von unscharfen Mengen höherer Stufen. **80i:03063**
Kalaba, Robert E. *See* **Chu, A. T. W.; et al., 80i:03062**
Khalili, Siamak Fuzzy measures and mappings. **80c:03057**
Kóczy, László T. Interactive σ-algebras and fuzzy objects of type *N*. **80d:03057**
Lowen, Robert On fuzzy complements. **80j:03080**
Negoiță, C. V. (*with* Ștefănescu, C. Al.) Fuzzy objects in topoi: a generalization of fuzzy sets. (Romanian summary) **80j:03081**

Nguyen, Hung Trang Toward a calculus of the mathematical notion of possibility. 80m:03090
Some mathematical tools for linguistic probabilities. 80e:03069
di Nola, A. (*with* Ventre, Aldo G. S.) On some sequences of fuzzy sets. (French summary) 80h:03076
Prade, Henri *See* Dubois, Didier, 80h:03075
Sanchez, Elie Resolution of eigen fuzzy sets equations. 80g:03056
Inverses of fuzzy relations. Application to possibility distributions and medical diagnosis. 80e:03070
Silvert, William Symmetric summation: a class of operations on fuzzy sets. 80k:03059
Spingarn, K. *See* Chu, A. T. W.; et al., 80i:03062
Ştefănescu, C. Al. *See* Negoiţă, C. V., 80j:03081
Ventre, Aldo G. S. *See* di Nola, A., 80h:03076
Watanabe, Satosi A generalized fuzzy-set theory. 80b:03088
Yager, Ronald R. On solving fuzzy mathematical relationships. 80f:03064
On the measure of fuzziness and negation. I. Membership in the unit interval. 80f:03064
Fuzzy subsets of type II in decisions. 80k:03060
A linguistic variable for importance of fuzzy sets. 80k:03061

Secondary classifications:

Amagasa, Michio *See* Tazaki, Eiichiro, (80e:94032)
Anthony, J. M. (*with* Sherwood, H.) Fuzzy groups redefined. (80f:20040)
Baldwin, J. F. (*with* Pilsworth, B. W.) A theory of fuzzy probability. (80m:94119)
Bezdek, James C. (*with* Spillman, Bonnie; Spillman, Richard) A fuzzy relation space for group decision theory. (80c:94026)
Caire, Luisella (*with* Cerruti, Umberto) Fuzzy relational spaces and algebraic structures. (Italian summary) (80a:54006)
Cerruti, Umberto Non-Archimedean valued modules and non-Cantorian set theory. (80c:04006)
See also Caire, Luisella, (80a:54006)
D'Ambrosio, Ubiratan On fuzzy sets and generalized optimal processes. (Portuguese. Romanian summary) (80a:93105)
(Dimitrov, V.) *See* Wechler, Wolfgang, (80g:68105)
Dubois, Didier (*with* Prade, Henri) Operations in a fuzzy-valued logic. (80m:94120)
Dumitrescu, D. On some measures of nonfuzziness. (Romanian summary) (80c:94027)
Fadini, Angelo Indecisive sets and their algebra. (Italian. English summary) (80g:03055)
(Gupta, Madan M.) *See* Advances in fuzzy set theory and applications, (80k:00006)
Jumarie, Guy New results in relativistic information and general systems. Rényi entropy, observed probability, relativistic fuzzy sets, generative semantics. (80k:94063)
A relativistic approach to modelling dynamic systems involving human factors. (80b:93136)
Kalpov, V. H. (*with* Seljugin, A. A.) Classification in a space of fuzzy variables. (Russian) (80m:94121)
Kalaba, Robert E. (*with* Spingarn, K.) Numerical approaches to the eigenvalues of Saaty's matrices for fuzzy sets. (80a:65077)
Kandel, Abraham A note on the simplification of fuzzy switching functions. (80g:94116)
(*with* Lee, Samuel C.) ★Fuzzy switching and automata: theory and applications. (80g:94117)
See also Rickman, Sharon M., (80g:94118)
Khalili, Siamak Independent fuzzy events. (80e:60004)
Kim, Jin Bai Note on the semigroup of fuzzy matrices. (80g:15025)
Lee, Samuel C. *See* Kandel, Abraham, (80g:94117)
Liu, Ying Ming *See* Pu, Bao Ming, (80e:54006)
Malvache, N. *See* Willaeys, D., (80m:94123)
Nojiri, Hideyuki On the fuzzy team decision in a changing environment. (80m:90012)
Ostasiewicz, Walenty Calculus of fuzzy numbers. (Polish) (80k:94064)
Pavelka, Jan On fuzzy logic. I. (80j:03038a)
On fuzzy logic. II. Enriched residuated lattices and semantics of propositional calculi. (80j:03038b)
On fuzzy logic. III. Semantical completeness of some many-valued propositional calculi. (80j:03038c)
Pilsworth, B. W. *See* Baldwin, J. F., (80m:94119)
Prade, Henri *See* Dubois, Didier, (80m:94120)
Pu, Bao Ming (*with* Liu, Ying Ming) Product and quotient spaces in fuzzy topology. (Chinese) (80e:54006)
(Ragade, Rammohan K.) *See* Advances in fuzzy set theory and applications, (80k:00006)
Rickman, Sharon M. (*with* Kandel, Abraham) Column table approach for the minimization of fuzzy functions. (80g:94118)
Riera, T. *See* Trillas Ruiz, Enrique, (80k:94065)
Rosenfeld, Azriel Fuzzy digital topology. (80b:68109)
Seljugin, A. A. *See* Kalpov, V. H., (80m:94121)
Sherwood, H. *See* Anthony, J. M., (80f:20040)
Spillman, Bonnie *See* Bezdek, James C.; et al., (80c:94026)
Spillman, Richard *See* Bezdek, James C.; et al., (80c:94026)
Spingarn, K. *See* Kalaba, Robert E., (80a:65077)
Tazaki, Eiichiro (*with* Amagasa, Michio) Structural modeling in a class of systems using fuzzy sets theory. (80e:94032)
Trillas Ruiz, Enrique (*with* Riera, T.) Entropies in finite fuzzy sets. (80k:94065)
Wechler, Wolfgang ★The concept of fuzziness in automata and language theory. (80g:68105)
A note on closure properties of R-fuzzy events. (80b:68098)
Willaeys, D. (*with* Malvache, N.) Contribution of the fuzzy set theory to man-machine system. (80m:94123)
Yager, Ronald R. Mathematical programming with fuzzy constraints and a preference on the objective. (80i:90104)
Fuzzy sets, probabilities, and decision. (80k:93013)
See also Advances in fuzzy set theory and applications, (80k:00006)
Advances in fuzzy set theory and applications ★Advances in fuzzy set theory and applications. (80k:00006)
Fuzzy set theory *See* Advances in fuzzy set theory and applications, (80k:00006)

03E75 Applications

Takeuti, Gaisi A transfer principle in harmonic analysis. 80h:03077

Secondary classifications:

Lungarzo, Carlos A. Superposition of states in quantum logic from a set-theoretical point of view. (80h:03092)

03E99 None of the above, but in this section

Alkor, C. The problem of extendability. (Italian summary) 80h:03078
Humke, Paul D. A note on connected coverings of the plane. 80h:03089
Rosenthal, John W. Truth in all of certain well-founded countable models arising in set theory. II. 80i:03065
Rukhaia, Kh. M. A duality theorem. 80k:03062

Secondary classifications:

Gottlieb, Dale (*with* McCarthy, Timothy) Substitutional quantification and set theory. (80m:03012)
Marek, Wiktor (*with* Nyberg, A. M.) Extendability of ZF models in the von Neumann hierarchy to models of KM theory of classes. (80f:03034)
McCarthy, Timothy *See* Gottlieb, Dale, (80m:03012)
Nyberg, A. M. *See* Marek, Wiktor, (80f:03034)

03Fxx Proof theory and constructive mathematics

Secondary classifications:

Kreisel, G. Some facts from the theory of proofs and some fictions from general proof theory. (80h:03012)
Norgėla, S. Herbrand's deduction-search strategies in predicate calculus. I. (Russian. Lithuanian and English summaries) (80e:03050)

03F05 Cut-elimination and normal-form theorems

Caporaso, Salvatore Consistency proof without transfinite induction for a formal system for Turing machines. 80j:03082
Cellucci, Carlo ★Teoria della dimostrazione. (Italian) [Proof theory] 80f:03065
Haberthür, R. Choice sequences and reduction processes. 80e:03071
Kuzičev, A. S. Theorem on the mean sequent in the $\mathcal{G}$-system of λ-conversion. (Russian) 80b:03090a
The consistency of formal arithmetic. (Russian) 80b:03090b
Leivant, Daniel Assumption classes in natural deduction. 80h:03079
Statman, Richard Lower bounds on Herbrand's theorem. 80h:03080
Umezawa, Toshio A method for cut elimination in intuitionistic predicate logic and classical predicate logic. 80k:03063

Secondary classifications:

van Dalen, D. (*with* Statman, Richard) Equality in the presence of apartness. (80h:03089)
Statman, Richard *See* van Dalen, D., (80h:03089)

03F10 Functionals in proof theory

Schwichtenberg, Helmut On bar recursion of types 0 and 1. 80h:03081
Scott, Philip J. The "Dialectica" interpretation and categories. 80m:03091
Vogel, Helmut Über die mit dem Bar-Rekursor vom Typ 0 definierbaren Ordinalzahlen. 80m:03092

Secondary classifications:

Vogel, Helmut Über ein mit der Bar-Induktion verwandtes Schema. (80m:03095)

03F15 Recursive ordinals and ordinal notations

Yasugi, Mariko Self-iterating schemes of ordinal diagrams. 80h:03082b
Some properties of ordinal diagrams. 80h:03082a

Secondary classifications:

Girard, J. Y. Functionals and ordinoids. (80h:03067)
Vogel, Helmut Über die mit dem Bar-Rekursor vom Typ 0 definierbaren Ordinalzahlen. (80m:03092)

03F20 Complexity of proofs

Solomon, Martin K. Some results on measure independent Gödel speed-ups. 80h:03091

Secondary classifications:

Cook, Stephen A. (*with* Reckhow, Robert A.) The relative efficiency of propositional proof systems. (80e:03007)
Parlamento, Franco On the completeness of the ω-rule. (Italian. English summary) (80h:03085)
Reckhow, Robert A. *See* Cook, Stephen A., (80e:03007)
Statman, Richard Lower bounds on Herbrand's theorem. (80h:03080)

03F25 Relative consistency and interpretations

Boolos, George Reflection principles and iterated consistency assertions. **80k:03064**
Švejdar, Vítězslav Degrees of interpretability. **80e:03072**

Secondary classifications:

Crabbé, Marcel Ambiguity and stratification. **(80h:03073)**
Guaspari, D. Partially conservative extensions of arithmetic. **(80j:03083)**
Pražmowski, Krzystof Conciseness and hierarchy of theories. (Russian summary) **(80j:03021)**

03F30 First-order arithmetic and fragments

Guaspari, D. (*with* Solovay, Robert M.) Rosser sentences. **80h:03083**
Partially conservative extensions of arithmetic. **80j:03083**
Montagna, Franco On the formulas of Peano arithmetic which are provably closed under modus ponens. (Italian summary) **80h:03084**
Parlamento, Franco On the completeness of the ω-rule. (Italian. English summary) **80h:03085**
Smoryński, Craig ω-consistency and reflection. **80g:03057**
Solovay, Robert M. *See* **Guaspari, D., 80h:03083**
Ursini, Aldo A sequence of theories for arithmetic whose union is complete. (Italian summary) **80d:03058**
On the set of "meaningful" sentences of arithmetic. **80j:03084**
Väänänen, Jouko A new incompleteness in arithmetic. (Finnish. English summary) **80c:03058**
Yukami, Tsuyoshi A note on a formalized arithmetic with function symbols $'$ and $+$. **80g:03058**

Secondary classifications:

Lipton, Richard J. Model theoretic aspects of computational complexity. **(80e:03042)**
Loveland, D. W. *See* **Reddy, C. R., (80d:68057)**
Nakamura, Akira *See* **Ono, Hiroakira, (80k:03045)**
Ono, Hiroakira (*with* Nakamura, Akira) Undecidability of the first-order arithmetic $A[P(x), 2x, x+1]$. **(80k:03045)**
Penzin, Ju. G. The problem of twins in formal arithmetic. (Russian) **(80m:03115)**
Reddy, C. R. (*with* Loveland, D. W.) Presburger arithmetic with bounded quantifier alternation. **(80d:68057)**
Shostak, Robert E. A practical decision procedure for arithmetic with function symbols. **(80f:68020)**

03F35 Second- and higher-order arithmetic and fragments [See also 03E30, 03E70.]

Diller, Justus Functional interpretations of Heyting's arithmetic in all finite types. **80f:03066**
Hayashi, Susumu On derived rules of intuitionistic second order arithmetic. **80h:03086**
Kanovei, V. G. The essentialness of parameters and the complexity of the fundamental formula of the comprehension scheme in second-order arithmetic. (Russian) **80f:03067**
Expressibility of a forcing formula in analysis. (Russian. English summary) **80j:03085**
Ryan, William Gödel's second incompleteness theorem for general recursive arithmetic. **80b:03092**
Vogel, Helmut Eine beweistheoretische Anwendung partieller stetiger Funktionale. **80h:03087**
Weinstein, Scott Some applications of Kripke models to formal systems of intuitionistic analysis. **80h:03088**

Secondary classifications:

Kuzičev, A. S. Formal arithmetic in combinatorially complete systems. I. (Russian. English summary) **(80a:03019a)**
Formal arithmetic in combinatorially complete systems. II. (Russian. English summary) **(80a:03019b)**

03F50 Metamathematics of constructive systems

van Dalen, D. (*with* Statman, Richard) Equality in the presence of apartness. **80h:03089**
Interpreting intuitionistic logic. **80m:03093**
Friedman, Harvey Classically and intuitionistically provably recursive functions. **80b:03093**
Gorgi, Ford Vagris The independence of the rule of syllogism in S_2. **80m:03094**
Jervell, Herman Ruge Constructive universes. I. **80e:03073**
Lifschitz, Vladimir CT_0 is stronger than $CT_0!$. **80b:03094**
Mirkowska, Grażyna (*with* Orłowska, Ewa) An elimination of iteration quantifiers in a certain class of algorithmic formulas. **80a:03070**
Orłowska, Ewa *See* **Mirkowska, Grażyna, 80a:03070**
Statman, Richard *See* **van Dalen, D., 80h:03089**
Vogel, Helmut Über ein mit der Bar-Induktion verwandtes Schema. **80m:03095**

Secondary classifications:

Citkin, A. I. Structurally complete superintuitionistic logics. (Russian) **(80d:03024)**

03F55 Intuitionistic mathematics

Arruda, Ayda I. Some remarks on Griss' logic of negationless intuitionistic mathematics. **80b:03095**
Ashvinikumar Microscopic completeness of full indications and intuitionist contradictory proofs. **80i:03066a**
van Dalen, D. An interpretation of intuitionistic analysis. **80i:03067**
Krol', M. D. A topological model for intuitionistic analysis with Kripke's scheme. **80b:03096**
Leivant, Daniel ★Absoluteness of intuitionistic logic. **80g:03059**
Schwarz, G. F. On some extensions of intuitionistic type theory. (Russian. English summary) **80i:03068**
de Swart, H. C. M. First steps in intuitionistic model theory. **80c:03059**
Szabo, M. E. ★Algebra of proofs. **80b:03097**
Troelstra, A. S. On Ashvinikumar's principle of microscopic completeness. **80i:03066b**
See also **van Dalen, D., 80i:03067**
Wessel, Norbert The inconsistency of Bernini's very strong intuitionistic theory. **80m:03096**

Secondary classifications:

Goodman, N. (*with* Myhill, J.) Choice implies excluded middle. **(80e:03068)**
Greenleaf, Newcomb Linear order in lattices: a constructive study. **(80c:06025)**
Hayashi, Susumu On derived rules of intuitionistic second order arithmetic. **(80h:03086)**
Lifschitz, Vladimir CT_0 is stronger than $CT_0!$. **(80b:03094)**
Myhill, J. *See* **Goodman, N., (80e:03068)**
Troelstra, A. S. Completeness and validity for intuitionistic predicate logic. **(80k:03017)**
Weinstein, Scott Some applications of Kripke models to formal systems of intuitionistic analysis. **(80h:03088)**

03F60 Recursive analysis

Demuth, Osvald (*with* Kryl, R.; Kučera, Antonin) The use of the theory of functions that are partial recursive relative to numerical sets in constructive mathematics. (Russian. English and Czech summaries) **80a:03071**
Hauck, Jürgen Zum Zwischenwertsatz in der konstruktiven Analysis. (Russian, English and French summaries) **80b:03098**
Konstruktive Darstellungen reeller Zahlen und Folgen. **80b:03099**
Kryl, R. *See* **Demuth, Osvald; et al., 80a:03071**
Kučera, Antonin *See* **Demuth, Osvald; et al., 80a:03071**
Pour-El, M. B. (*with* Richards, Ian) Differentiability properties of computable functions—a summary. **80d:03059**
Richards, Ian *See* **Pour-El, M. B., 80d:03059**

03F65 Other constructive mathematics

Aczel, Peter The type theoretic interpretation of constructive set theory. **80f:03068**
Bridges, Douglas S. On continuous mappings between locally compact metric spaces. **80i:03069**
On weak operator compactness of the unit ball of $L(H)$. **80d:03060**
On the constructive convergence of series of independent functions. **80g:03060**
Demuth, Osvald Constructive analogues of generalized absolutely continuous functions of generalized bounded variation. (Russian) **80b:03100**
Constructive Denjoy integrals. (Russian) **80k:03065**
Lauener, Henri Sémantique et méthode constructiviste. **80h:03090**
Mandelkern, Mark Suprema of located sets. **80k:03066**
Margenstern, Maurice On a variant of constructivisation of the theory of almost periodic functions. **80b:03101**
Zahn, Peter ★Ein konstruktiver Weg zur Masstheorie und Funktionalanalysis. **80c:03060**

Secondary classifications:

Bridges, Douglas S. A note on Morse's lambda-notation in set theory. **(80b:03073)**
Demuth, Osvald (*with* Kryl, R.; Kučera, Antonin) The use of the theory of functions that are partial recursive relative to numerical sets in constructive mathematics. (Russian. English and Czech summaries) **(80a:03071)**
Kryl, R. *See* **Demuth, Osvald; et al., (80a:03071)**
Kučera, Antonin *See* **Demuth, Osvald; et al., (80a:03071)**
(Matljasevič, Ju. V.) *See* **Studies in constructive mathematics and mathematical logic, (80j:03005)**
Mihalinec, M. Endomorphisms of sheaves of constructive functions. (Russian. English summary) **(80j:03092)**
Nogina, E. Ju. Enumerable topological spaces. (Russian) **(80e:03051)**
Schwichtenberg, Helmut On bar recursion of types 0 and 1. **(80h:03081)**
(Slisenko, A. O.) *See* **Studies in constructive mathematics and mathematical logic, (80j:03005)**
Constructive mathematics *See* **Studies in constructive mathematics and mathematical logic, (80j:03005)**
Mathematical logic *See* **Studies in constructive mathematics and mathematical logic, (80j:03005)**
Studies in constructive mathematics and mathematical logic ★Исследования по конструктивной математике и математической логике. VIII. (Russian) [Studies in constructive mathematics and mathematical logic. VIII] **(80j:03005)**

03F99 None of the above, but in this section

Bryll, Grzegorz (*with* Miklos, Stanisław) The theory of concrete and abstract words. (Polish. English summary) **80f:03069**
Miklos, Stanisław *See* **Bryll, Grzegorz, 80f:03069**

Secondary classifications:

(Feferman, Solomon) *See* **How convincing is a proof?, (80m:03024)**
(Manin, Ju. I.) *See* **How convincing is a proof?, (80m:03024)**

(Neumann, B. H.) *See* **How convincing is a proof?**, (80m:03024)
Smoryński, Craig Calculating self-referential statements. I. Explicit calculations. (80m:03030)
How convincing is a proof? How convincing is a proof? (80m:03024)

03Gxx Algebraic logic

03G05 Boolean algebras [See also 06Exx.]

Both, N. Measures and metrics in the two-valued logic. **80f:03070**
Brink, Chris The algebra of relatives. **80m:03097**
Carvallo, Michel Traitement algébrique d'une chaîne d'implications logiques. (English summary) **80b:03102**
Čimev, K. N. Separable pairs of functions of six arguments. (Bulgarian. Russian and French summaries) **80a:03072**
Loats, James T. (*with* Rubin, Matatyahu) Boolean algebras without nontrivial onto endomorphisms exist in every uncountable cardinality. **80f:03071**
Rubin, Matatyahu *See* **Loats, James T.**, **80f:03071**
Vaičenko, V. P. On the calculation of all nontrivial simple decompositions of a function of the algebra of logic. (Russian) **80j:03086**
Žuravlev, Ju. I. Local algorithms over disjunctive normal forms. (Russian) **80b:03091**

Secondary classifications:

Abian, Alexander Inducive Boolean algebras and their special prime ideals. **(80j:06013)**
André, C. *See* **Auguin, M.; et al.**, **(80g:94079)**
Auguin, M. (*with* Boeri, F.; André, C.) An algorithm for designing multiple Boolean functions: application to PLAs. (French and German summaries) **(80g:94079)**
Boeri, F. *See* **Auguin, M.; et al.**, **(80g:94079)**
de Bruijn, N. G. The use of partially ordered sets for the study of nonclassical propositional logics. (French summary) **(80b:03039)**
Carrega, Jean-Claude *See* **Ponasse, Daniel**, **(80j:06015)**
Čirkov, M. K. (*with* Èglitis, L. V.) Interference stability of generalized partial functions of algebraic logic. (Russian) **(80g:94082)**
Simple implicators of a system of generalized partial functions. (Russian) (80g:94083)
Commentz-Walter, Beate Size-depth trade-off in monotone Boolean formulae. (80m:68038)
Ecsedi-Tóth, P. *See* **Móricz, Ferenc; et al.**, **(80j:94041)**
Èglitis, L. V. *See* **Čirkov, M. K.**, **(80g:94082)**
Gronau, Hans-Dietrich On the generation of binary vectors by Boolean functions. (Hungarian and Russian summaries) **(80i:06010)**
Jech, Thomas A game theoretic property of Boolean algebras. **(80c:90184)**
Kosovskiĭ, N. K. The complexity of the solvability of Boolean functional equations. (Russian) **(80d:68062)**
Lambek, J. (*with* Rattray, B. A.) Functional completeness and Stone duality. (80c:18006)
Lysenko, È. V. (*with* Popov, V. A.; Skibenko, I. T.) Decomposition of logic circuits into standard parts. (Russian) **(80a:94060)**
Mead, Jerud Recursive prime models for Boolean algebras. **(80j:03050)**
Miller, D. Michael A canonical representation for many-valued symmetric functions. (80g:94086)
Móricz, Ferenc (*with* Varga, A.; Ecsedi-Tóth, P.) A method for minimizing partially defined Boolean functions. **(80j:94041)**
Parkin, I. A. On determining the prime implicants of a Boolean function without recourse to its minterm form. **(80g:94090)**
Ponasse, Daniel (*with* Carrega, Jean-Claude) ★Algèbre et topologie booléennes. (80j:06015)
Popov, V. A. *See* **Lysenko, È. V.; et al.**, **(80a:94060)**
Rattray, B. A. *See* **Lambek, J.**, **(80c:18006)**
Riser, John A simplification procedure for alternational normal schemata. **(80k:03014)**
Rubin, Matatyahu On the automorphism groups of homogeneous and saturated Boolean algebras. **(80d:03032)**
Skibenko, I. T. *See* **Lysenko, È. V.; et al.**, **(80a:94060)**
Toman, E. The geometric structure of random Boolean functions. (Russian) **(80j:94053)**
Uhlig, Dietmar A function of the algebra of logic with many subfunctions and a small complexity of realization. (Russian) **(80i:03052)**
Varga, A. *See* **Móricz, Ferenc; et al.**, **(80j:94041)**

03G10 Lattices and related structures [See also 06Bxx.]

Fidel, Manuel M. An algebraic study of a propositional system of Nelson. **80a:03073**
Lambrou, M. S. Nontrivially pseudocomplemented lattices are complemented. **80j:03087**
Rao, N. Prabhakara Seminormal autometrized algebras. **80a:03074**
Šehtman, V. B. Reiger-Nishimura ladders. (Russian) **80a:03075**

Secondary classifications:

Chandran, V. R. On two analogues of Cohen's theorem to join-semi-lattices. (80m:06004)
Cignoli, Roberto Deductive systems and congruence relations in ortholattices. (80b:06010)
Čilin, V. I. Ordered topologies in logics. (Russian) **(80c:06013)**
Cornish, William H. (*with* Fowler, Peter R.) Coproducts of Kleene algebras. **(80f:06014)**
Dziobiak, Wiesław An example concerning the lattice of the structural consequence operations. **(80h:03043)**
Fowler, Peter R. *See* **Cornish, William H.**, **(80f:06014)**
Maksimova, L. L. Craig's theorem in superintuitionistic logics and amalgamable varieties. (Russian) **(80c:03028)**
Rautenberg, Wolfgang More about the lattice of tense logics. **(80h:03032)**
Zeman, J. Jay Generalized normal logic. **(80j:03035)**
Normal, Sasaki, and classical implications. **(80f:03028)**
Normal implications, bounded posets, and the existence of meets. (80m:0304

03G12 Quantum logic [See also 81B10.]

Barone, F. (*with* Galdi, G. P.) On the question of atomicity and determinism in Boolean systems. **80e:03074**
Bugajski, Sławomir Probability implication in the logics of classical and quantum mechanics. **80m:03098**
Čilin, V. I. Continuous valuations on logics. (Russian) **80j:03088**
Czelakowski, Janusz Partial Boolean algebras in a broader sense. **80k:03067**
Dishkant, Herman The connective "becoming" and the paradox of electron diffraction. **80c:03061**
Galdi, G. P. *See* **Barone, F.**, **80e:03074**
Lungarzo, Carlos A. Superposition of states in quantum logic from a set-theoretical point of view. **80h:03092**
Topologies on quantum logics induced by the set of states. **80b:03103**
Majewski, Mirosław On some matrix of the Birkhoff and von Neumann quantum logic. **80d:03061**
Mittelstaedt, Peter (*with* Stachow, E.-W.) The principle of excluded middle in quantum logic. **80a:03076**
Quantum logic. **80f:03072**
Stachow, E.-W. Completeness of quantum logic. **80f:03073**
Quantum logical calculi and lattice structures. **80h:03093**
See also **Mittelstaedt, Peter**, **80a:03076**
Zeman, J. Jay Quantum logic with implication. **80m:03099**

Secondary classifications:

Almog, J. Perhaps (?), new logical foundations are needed for quantum mechanics. **(80d:03023)**
Brabec, Jiří Compatibility in orthomodular posets. (Russian and Czech summaries) **(80h:06008)**
Cook, Thurlow A. The geometry of generalized quantum logics. **(80k:81009)**
Deliyannis, Platon C. Conditioning of states. II. **(80b:81008)**
Eberhard, P. H. Bell's theorem and the different concepts of locality. (Italian and Russian summaries) **(80d:81002)**
Fáy, Gyula (*with* Tőrös, Róbert) ★Kvantumlogika. (Hungarian) [Quantum logic] **(80b:81009)**
Finkelstein, David Holistic methods. **(80a:81002)**
Foulis, D. J. *See* **Randall, C. H.**, **(80f:81013)**
Gudder, Stanley P. (*with* Michel, John R.) Embedding quantum logics in Hilbert space. **(80m:81012)**
Guz, Wawrzyniec On the lattice structure of quantum logics. **(80a:81005)**
On the simultaneous verifiability of yes-no measurements. **(80d:81003)**
(Hoehnke, H.-J.) *See* **Zaĭcev, G. A.**, **(80k:81002)**
Ivert, P.-A. (*with* Sjödin, T.) On the impossibility of a finite propositional lattice for quantum mechanics. **(80g:06005)**
Kupczyński, M. Is the Hilbert space language too rich? **(80j:81008)**
Marlow, A. R. Quantum theory and Hilbert space. **(80a:81006)**
Michel, John R. *See* **Gudder, Stanley P.**, **(80m:81012)**
Randall, C. H. (*with* Foulis, D. J.) The operational approach to quantum mechanics. **(80f:81013)**
Rozenský, Zdeněk Ein Beitrag zur Theorie der Orthogonalität auf Mengen. (Czech and Russian summaries) **(80i:04003)**
Sjödin, T. *See* **Ivert, P.-A.**, **(80g:06005)**
Stachow, E.-W. Quantum logical calculi and lattice structures. **(80f:81004)**
Stapp, Henry P. Whiteheadian approach to quantum theory and the generalized Bell's theorem. **(80b:81012)**
Szymańska-Bartman, Magdalena Orthogonality and orthocomplementation in partially ordered sets. **(80j:06012)**
Tőrös, Róbert *See* **Fáy, Gyula**, **(80b:81009)**
Wegener, Ursula Eine Lösung der "wahrscheinlichkeitstheoretischen Antinomie der Quantenmechanik". **(80m:81010)**
Zaĭcev, G. A. ★Algebraische Probleme der mathematischen und theoretischen Physik. **(80k:81002)**

03G15 Cylindric and polyadic algebras; relation algebras

Andréka, Hajnal (*with* Németi, István) On universal algebraic logic and cylindric algebras. **80e:03075**
(*with* Németi, István) Not all representable cylindric algebras are neat reducts. **80m:03100**
Bednarek, A. R. (*with* Ulam, S. M.) Projective algebra and the calculus of relations. **80i:03070**
Brink, Chris Two axiom systems for relation algebras. **80m:03101**
Georgescu, George Modal polyadic algebras. **80m:03102**
Henkin, Leon Algebraic aspects of logic: past, present, future. **80b:03104**
Monk, J. Donald Omitting types algebraically. **80a:03077**
Németi, István *See* **Andréka, Hajnal**, **80e:03075** *and* **Andréka, Hajnal**, **80m:03100**
Pinter, Charles C. Cylindric algebras with a property of Rasiowa and Sikorski. **80e:03076**
Schönfeld, Wolfgang An undecidability result for relation algebras. **80f:03074**
Servi, Mario An axiomatization of existential lattices. (Italian. English summary) **80g:03061**
Sudkamp, Thomas A. On full cylindric set algebras. **80j:03089**
Ulam, S. M. *See* **Bednarek, A. R.**, **80i:03070**

03G20 Łukasiewicz and Post algebras

Becchio, Denise (*with* Iturrioz, L.) Sur une définition des algèbres de Łukasiewicz et de Post d'ordre n. **80b:03094**
Algèbres de Heyting, algèbres de Brouwer et algèbres trivalentes de Łukasiewicz. **80d:03062**
Deux définitions des algèbres de Heyting trivalentes involutives. **80m:03103**
Sur l'axiome d'Ivo Thomas. **80m:03104**
Filipoiu, Alexandru Representation theorems for Łukasiewicz algebras. **80f:03075**
Georgescu, George Some remarks on the polyadic Łukasiewicz algebras. **80c:03062**
Iturrioz, L. *See* **Becchio, Denise, 80b:03094**
Ponasse, Daniel Algèbres floues et algèbres de Lukasiewicz. **80d:03063**
Romov, B. A. Post algebras of type F_4^{∞}. (Russian. English summary) **80b:03105**
Tokarz, Marek Degrees of maximality of three- and four-valued RM-extensions. **80m:03105**

Secondary classifications:

Barton, Sally The functional completeness of Post's m-valued propositional calculus. **(80j:03036)**
Demetrovics, János On the main diagonal of Sheffer functions. **(80c:03018)**
Klukowski, Julian (*with* Łapińska-Różalska, Cecylia) Post posets as a generalization of Post algebras. **(80f:06013)**
Łapińska-Różalska, Cecylia *See* **Klukowski, Julian, (80f:06013)**
Lau, Dietlinde Über die Anzahl von abgeschlossnen Mengen linearer Funktionen der n-wertigen Logik. (English and Russian summaries) **(80c:03026)**
Bestimmung der Ordnung maximaler Klassen von Funktionen der k-wertigen Logik. **(80l:03039)**
Woźniakowska, Barbara Algebraic proof of the separation theorem for the infinite-valued logic of Łukasiewicz. **(80m:03057)**
Yaqub, Fawzi M. Free Post L-algebras. **(80b:06014)**

03G25 Other algebras related to logic

Ahsan, Javed (*with* Deeba, Elias Y.) On ideals in implicative BCK-algebras. **80a:03078**
Albert, Peter The algebra of fuzzy logic. **80a:03079**
Beazer, R. Axioms for generalized Newman algebras. **80b:03106**
Blok, W. J. An axiomatization of the modal theory of the veiled recession frame. **80m:03106**
Deeba, Elias Y. *See* **Ahsan, Javed, 80a:03078**
Denecke, Klaus-Dieter ★Algebraische Fragen nichtklassischer Aussagenkalküle. **80a:03080**
Hałkowska, Katarzyna An algebra of meaningful expressions of a system that contains conditional definitions. (Polish. English summary) **80e:03077**
Iséki, Kiyoshi (*with* Tanaka, Shôtarô) An introduction to the theory of BCK-algebras. **80a:03081**
On commutative BCK-algebras with condition (S). **80a:03082**
On implicative ideals in BCK-algebras. **80a:03083**
Some examples of Griss algebras. **80a:03086a**
On definitions of Griss algebras. **80a:03086b**
A new class of Griss type algebras. **80a:03086c**
Remarks on BCK-algebras with condition (S). **80j:03090a**
BCK-algebras with condition (S). **80m:03107**
Lugowski, Herbert Über Normalformen von Elementen freier Turing-Algebren. (Russian and English summaries) **80j:03091**
Monteiro, Luiz Construction des algèbres de Tarski libres sur un ensemble ordonné. **80f:03076**
Sambin, Giovanni Fixed points through the finite model property. **80b:03107**
Schwartz, Dietrich Darstellung der Lewyschen Algebren. **80f:03077**
Tanaka, Shôtarô *See* **Iséki, Kiyoshi, 80a:03081**
Thabeem, A. B. Equivalent conditions for some ideals in BCK-algebras. **80a:03087**
On complete BCK-algebras. **80a:03088**
Characterizations of certain ideals in implicative BCK-algebras. **80j:03090b**
Trohimenko, Valentin S. Some algebras of Menger relations. (Russian) **80a:03089**
Urquhart, Alasdair Distributive lattices with a dual homomorphic operation. **80l:03071**
Ursini, Aldo Intuitionistic diagonalizable algebras. **80m:03108**
Wolniewicz, Bogusław Some formal properties of objectives. **80g:03062**
Woźniakowska, Barbara The representation theorem for the algebras determined by the fragments of infinite-valued logic of Łukasiewicz. **80b:03108**
Yutani, Hiroshi Categoricity in the theory of BCK-algebras. **80a:03084**
Congruences on the products of BCK-algebras. **80a:03085**

Secondary classifications:

Daniľčenko, A. F. Parametrically closed classes of functions of three-valued logic. (Russian) **(80c:03025)**
Davey, Brian A. On the lattice of subvarieties. **(80j:08007)**
Hinde, C. J. Generalisation of Bochvar's 3-valued logic. **(80m:03053)**
Iséki, Kiyoshi Some problems on BCK-algebras with condition (S). **(80c:06019)**
(*with* Rama Rao, V. V.) Note on BCK-algebras with condition (S). **(80j:06016)**
Pinkava, Václav On some manipulative properties of the π-algebras. **(80m:03056)**
Prucnal, Tadeusz On Friedman's problem in mathematical logic. **(80b:03038)**
Rama Rao, V. V. *See* **Iséki, Kiyoshi, (80j:06016)**
Semenov, A. L. Some algorithmic problems for systems of algorithmic algebras. (Russian) **(80a:03055)**
Thabeem, A. B. Remarks on commutative BCK-algebras. **(80c:06018)**
Yutani, Hiroshi Coequalizer in the category of BCK-algebras. **(80b:18003)**
Coequalizer in the category of BCK-algebras. II. **(80k:18014)**

03G30 Categorical logic, topoi [See also 18B25.]

Blanc, Georges Équivalence naturelle et formules logiques en théorie des catégories. **80m:03109**
Calude, Cristian Categorical methods in computability. I. Recursive and nonprimitive recursive functions. (Romanian. English summary) **80m:03110a**
Categorical methods in computability. II. (Romanian. English summary) **80m:03110b**
Cartier, Pierre Logique, catégories et faisceaux [d'après F. Lawvere et M. Tierney]. **80m:03111**
Coste, Michel *See* **Coste-Roy, Marie-Françoise, 80m:03112**
Coste-Roy, Marie-Françoise (*with* Coste, Michel) The generic model of an e-stable geometric extension of the theory of rings is of line type. **80m:03112**
(Lawvere, F.) *See* **Cartier, Pierre, 80m:03111**
Marchini, Carlo Comparison of two categorical semantics. (Italian. English summary) **80m:03113**
Mihailesc, M. Endomorphisms of sheaves of constructive functions. (Russian. English summary) **80j:03092**
Petrescu, Ioana Model-companions for logical functors. **80a:03090**
Riccioli, Barbara Veit Forcing as a logical principle for the construction of sheaves. I. (Italian. French summary) **80b:03109a**
Forcing as a logical principle for the construction of sheaves. II. (Italian) **80b:03109b**
Rosebrugh, Robert Coequalizers in algebras for an internal type. **80m:03114**
(Tierney, M.) *See* **Cartier, Pierre, 80m:03111**

Secondary classifications:

Coste, Michel *See* **Coste-Roy, Marie-Françoise, (80m:14002)**
Coste-Roy, Marie-Françoise (*with* Coste, Michel) Topologies for real algebraic geometry. **(80m:14002)**
Di Sieno, Simonetta (*with* Galuzzi, Massimo) Categories based on a Heyting algebra. (Italian. English summary) **(80h:18005)**
Galuzzi, Massimo *See* **Di Sieno, Simonetta, (80h:18005)**
Loullis, George Sheaves and Boolean valued model theory. **(80k:03037)**
Negoiță, C. V. (*with* Ștefănescu, C. Al.) Fuzzy objects in topoi: a generalization of fuzzy sets. (Romanian summary) **(80j:03081)**
Ștefănescu, C. Al. *See* **Negoiță, C. V., (80j:03081)**

03G99 None of the above, but in this section

Rvačov, V. L. (*with* Tonïca, V. S.; Škljarov, L. Ï) A set of prime closing functions of three-valued logic. (Russian. English summary) **80j:03093**
Škljarov, L. Ï *See* **Rvačov, V. L.; et al., 80j:03093**
Tonica, V. S. *See* **Rvačov, V. L.; et al., 80j:03093**

Secondary classifications:

Barja Pérez, J. ★Álgebras universales en el cálculo de proposiciones. (Spanish) [Universal algebras in the propositional calculus] **(80b:03032)**
Brink, Chris The algebra of relatives. **(80m:03097)**

03Hxx Nonstandard models

Secondary classifications:

(Körner, S.) *See* **Robinson, Abraham, (80h:01039b)**
(Luxemburg, W. A. J.) *See* **Robinson, Abraham, (80h:01039b)**
Robinson, Abraham ★Selected papers of Abraham Robinson. Vol. II. **(80h:01039b)**

03H05 Infinitesimal analysis in pure mathematics [See also 26E35, 30G10, 54J05.]

Giannone, Alberto An introduction to nonstandard methods via simply additive measures. (Italian) **80d:03064**
Saito, Masahiko On the non-standard representation of linear mappings from a function space. **80a:03091**
Wattenberg, Frank Nonstandard measure theory: avoiding pathological sets. **80k:03095**

Secondary classifications:

Albeverio, Sergio (*with* Fenstad, Jens Erik; Høegh-Krohn, Raphael) Singular perturbations and nonstandard analysis. **(80k:34029)**
(Cauchy, Augustin Louis) *See* **Fisher, Gordon M., (80h:01016)**
Diener, Francine Famille d'équations à cycle limite unique. (English summary) **(80m:34025)**
Fenstad, Jens Erik *See* **Albeverio, Sergio; et al., (80k:34029)**
Fisher, Gordon M. Cauchy and the infinitely small. (French summary) **(80h:01016)**
Gonshor, Harry Enlargements of Boolean algebras and Stone space. **(80g:06017)**
An application of nonstandard analysis to category theory. **(80k:54090)**
Grainger, Arthur D. Finite points of filters in infinite-dimensional vector spaces. **(80k:46008)**
Haddad, Labib Comments on nonstandard topology. **(80f:54049)**
Helms, L. L. (*with* Loeb, Peter A.) Applications of nonstandard analysis to spin models. **(80d:82038)**
Henson, C. Ward Analytic sets, Baire sets and the standard part map. **(80k:28019)**
Unbounded Loeb measures. **(80b:28011)**
Herrmann, Robert A. Convergence spaces and nonstandard compactifications. **(80g:54058)**
Høegh-Krohn, Raphael *See* **Albeverio, Sergio; et al., (80k:34029)**
Laugwitz, Detlef ★Infinitesimalkalkül: Kontinuum und Zahlen. **(80d:26018)**

Li, Bang He Non-standard analysis and multiplication of distributions. **(80e:46028)**
Loeb, Peter A. An introduction to nonstandard analysis and hyperfinite probability theory. **(80m:60005)**
Weak limits of measures and the standard part map. **(80f:28020)**
See also **Helms, L. L., (80d:82038)**
Rosser, J. Barkley ★Logic for mathematicians. **(80b:03001)**
Sloan, Alan A note on exponentials of distributions. **(80m:46035)**
Smith, Bruce D. An application of nonstandard model theory. **(80i:17021)**
Tacon, D. G. Two characterizations of power compact operators. **(80d:47031)**
Troesch, Albert (*with* Urlacher, Émile) Perturbations singulières et analyse non standard. (English summary) **(80c:34047)**
Urlacher, Émile *See* **Troesch, Albert, (80c:34047)**
Wattenberg, Frank Nonstandard analysis and the theory of shape. **(80c:54057)**
Winkler, Regine Ein Existenzbeweis für gewöhnliche Differentialgleichungen mit Methoden der Nonstandard-Analysis. **(80c:34006)**
***B*-valued analysis and nonstandard analysis** ★*B*-valued analysis and nonstandard analysis. (Japanese) **(80b:03002)**
Kyoto *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**
Nonstandard analysis *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**
Symposium:
B-Valued Analysis and Nonstandard Analysis *See* ***B*-valued analysis and nonstandard analysis, (80b:03002)**

03H10 Other applications of infinitesimal analysis

Secondary classifications:

Tarski, Jan Short introduction to nonstandard analysis and its physical applications. **(80d:81047)**

03H15 Nonstandard models of arithmetic [See also 10N15, 12L15, 13L05.]

Lipshitz, L. Diophantine correct models of arithmetic. **80a:03092**
McAloon, Kenneth Consistency statements and number theories. **80b:03110**
Diagonal methods and strong cuts in models of arithmetic. **80k:03068**
Penzin, Ju. G. The problem of twins in formal arithmetic. (Russian) **80m:03115**
Richard, Denis On external properties of nonstandard models of arithmetic. (French summary) **80b:03111**

Secondary classifications:

Guaspari, D. Partially conservative extensions of arithmetic. **(80j:03083)**
Lipton, Richard J. Model theoretic aspects of computational complexity. **(80e:03042)**

03H20 Other nonstandard models [See also 54J05.]

Takeuchi, Yu Construction of nonstandard numbers from the rationals. (Spanish) **80k:03096**

Secondary classifications:

Button, Robert Warren A note on the Q-topology. **(80a:54096)**
Takeuti, Gaisi A transfer principle in harmonic analysis. **(80b:03077)**

03H99 None of the above, but in this section

04–XX SET THEORY

04–01 Elementary exposition, textbooks

Abian, Alexander On the restriction in the formulation of the axiom scheme of replacement of ZF. **80i:04001**
Bell, John The infinite past regained: a reply to Whitrow. **80g:04001**
van Dalen, D. (*with* Doets, H. C.; de Swart, H. C. M.) ★Sets: naïve, axiomatic and applied. **80b:04001**
Doets, H. C. *See* **van Dalen, D.; et al., 80b:04001**
Felscher, Walter ★Naive Mengen und abstrakte Zahlen. I. **80m:04001**
★Naive Mengen und abstrakte Zahlen. III. **80m:04002**
Ghosh, S. On a set-theoretic method. **80g:04002**
Joshi, S. R. Some remarks on infinite sets. **80d:04001**
Kuratowski, Kazimierz (*with* Mostowski, A. Włodzimierz) ★Teoria mnogości. (Polish) [Set theory] **80a:04001**
Mostowski, A. Włodzimierz *See* **Kuratowski, Kazimierz, 80a:04001**
Posada, Germán A proof of the Schröder-Bernstein theorem. (Spanish) **80g:04003**
de Swart, H. C. M. *See* **van Dalen, D.; et al., 80b:04001**

Secondary classifications:

Durnev, V. G. ★Элементы теории множеств и математической логика. (Russian) [Elements of set theory and mathematical logic] **(80g:03001)**
Edwards, Robert E. ★A formal background to mathematics. Ia. **(80b:03001a)**
★A formal background to mathematics. Ib. **(80b:03001b)**
Hałkowska, Katarzyna *See* **Słupecki, Jerzy; et al., (80a:03001)**
Levin, Margarita R. *See* **Levin, Michael E., (80a:03063)**
Levin, Michael E. (*with* Levin, Margarita R.) The independence results of set theory: an informal exposition. **(80a:03063)**
Piróg-Rzepecka, Krystyna *See* **Słupecki, Jerzy; et al., (80a:03001)**
Quine, Willard Van Orman ★Mengenlehre und ihre Logik. **(80b:03075)**
Słupecki, Jerzy (*with* Hałkowska, Katarzyna; Piróg-Rzepecka, Krystyna) ★Logika i teoria mnogości. (Polish) [Logic and set theory] **(80a:03001)**

04–02 Advanced exposition (research surveys, monographs, etc.)

Devlin, Keith J. ★Fundamentals of contemporary set theory. **80j:04001**
Lévy, Azriel ★Basic set theory. **80k:04001**

Secondary classifications:

Jech, Thomas ★Set theory. **(80a:03062)**

04–03 Historical (must also be assigned at least one classification number from Section 01)

Lake, John The approaches to set theory. **80i:04002**

Secondary classifications:

Angelelli, Ignacio "Class as one" and "class as many" before modern set theory. (Italian and German summaries) **(80g:01010)**
(Cantor, Georg) *See* **Dauben, Joseph Warren, (80f:01010); Dauben, Joseph Warren, (80g:01021); Dauben, Joseph Warren, (80h:01015)** *and* **Medvedev, F. A., (80j:01021)**
Dauben, Joseph Warren Georg Cantor: the personal matrix of his mathematics. **(80f:01010)**
★Georg Cantor. **(80g:01021)**
Georg Cantor's creation of transfinite set theory: personality and psychology in the history of mathematics. **(80h:01015)**
(Levi, Beppo) *See* **Moss, Barbara, (80j:01024)**
McIntosh, Clifton Skolem's criticisms of set theory. **(80j:03012)**
Medvedev, F. A. The axiom of choice in the works of G. Cantor on the theory of sets. (Russian) **(80j:01021)**
Moss, Barbara Beppo Levi and the axiom of choice. **(80j:01024)**
Pepe, Luigi The "prime element" of the *Rational arithmetic* of Pietro Mengoli. (Italian. English summary) **(80j:01012)**
Biography:
Cantor, Georg *See* **Dauben, Joseph Warren, (80f:01010)**

04–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

Brown, Frank Malloy Towards the automation of set theory and its logic. **(80d:68124)**
Lao, Marek J. A new data structure for the UNION-FIND problem. **(80i:68035)**

04–06 Proceedings, conferences, etc.

04A05 Relations, functions [See also 08A02.]

Butrick, Richard Shoenfield on n-tuples. **80a:04002**
Christian, Curt Eine Definition des geordneten Paares von Klassen. **80c:04001**
Cogis, Olivier Détermination d'un préordre total contenant un préordre et contenu dans une relation de Ferrers, lorsque leur domaine commun est fini. (English summary) **80j:04002**
Fishburn, Peter C. Operations on binary relations. **80f:04001**
Heiberg, Charles H. A generalization of the Schroeder-Bernstein theorem. **80c:04002**
Landraitis, Charles A combinatorial property of the homomorphism relation between countable order types. **80h:04001**
Lucey, Kenneth G. The ancestral relation without classes. **80d:04002**
Miličić, M. A multiplication of m-relations. **80b:04002**
Parovičenko, I. I. On some questions related to iteration of set-theoretic operations. (Russian) **80c:04003**
Pouzet, Maurice Condition de chaîne en théorie des relations. (English summary) **80c:04004a**
Correction to: "Condition de chaîne en théorie des relations" (Israel J. Math. **30** (1978), no. 1-2, 65–84). **80c:04004b**
Rozenský, Zdeněk Ein Beitrag zur Theorie der Orthogonalität auf Mengen. (Czech and Russian summaries) **80i:04003**

Secondary classifications:

Abian, Alexander Representation and completion of partially ordered sets by dyadic sequences. **(80j:06001)**
Barankin, Edward W. (*with* Takahasi, Koiti) Betweenness for real vectors and lines. I. Basic generalities. **(80a:06005)**
Burgin, M. S. (*with* Harlamov, M. A.) Connections between relations and their applications in computer science. (Russian) **(80g:68012)**
Defays, D. Analyse hiérarchique des préférences et généralisations de la transitivité. **(80i:90009)**
Gillam, David W. H. Intervals of binary relations. **(80i:03046)**
Harlamov, M. A. *See* **Burgin, M. S., (80g:68012)**
Laver, Richard Better-quasi-orderings and a class of trees. **(80c:06005)**
Sanchez, Elie Inverses of fuzzy relations. Application to possibility distributions and medical diagnosis. **(80e:03070)**
Schock, Rolf On classifications and hierarchies. **(80j:03014)**
Takahasi, Koiti *See* **Barankin, Edward W., (80a:06005)**

04A10 Transfinite numbers

Abian, Alexander On the cardinality of some powersets. **80f:04002**
Hickman, John L. Commutativity of generalized ordinals. **80c:04005**
On R. McBeth's paper: "Fundamental sequences for initial ordinals smaller than a certain Θ_0" (Z. Math. Logik Grundlag. Math. **22** (1976), no. 2, 97–104). **80b:04003**

Semi-monotone series of ordinals. **80d:04004**
Commutativity in series of ordinals: a study of invariants. **80h:04002**
Polynomials in a single ordinal variable. **80d:04003**
A class of "near-finite" order types. **80h:04003**
Boundedness properties of cardinals. **80j:04003**

(McBeth, Rod) *See* **Hickman, John L., 80b:04003**

Schmidt, Diana Associative ordinal functions, well partial orderings and a problem of Skolem. **80b:04004**

Secondary classifications:

Chudnovsky, David V. Sequentially continuous mappings of product spaces. **(80m:54017)**
Felscher, Walter ★Naive Mengen und abstrakte Zahlen. III. **(80m:04002)**
Harazišvili, A. B. On the number of metric transitive measures on a given σ-algebra. (Russian. English and Georgian summaries) **(80m:28001)**
Hayleva, T. E. Classification of spaces of continuous functions on segments of ordinals. (Russian) **(80f:54008)**
Tauts, A. Multivalence of the axiom of normal functions. (Russian. Estonian and German summaries) **(80b:03086)**

04A15 Descriptive set theory; Borel classifications, Suslin schemes, etc. [See also 03E15, 28A05, 54H05.]

Abian, Alexander On Borel, Baire and Lebesgue sets. **80h:04004**
Bourgain, Jean A stabilization property and its applications in the theory of sections. **80c:04001**
Gardner, R. J. On concentrated sets. **80b:04005**
Lee, Ken W. A class of sets whose distance set fills an interval. **80f:04003**
Louveau, Alain Familles séparantes pour les ensembles analytiques. (English summary) **80i:04004**
Miller, Arnold W. On the length of Borel hierarchies. **80m:04003**

Secondary classifications:

Cenzer, Douglas (*with* Mauldin, R. Daniel) Measurable parametrizations and selections. **(80i:28010)**
Dellacherie, Claude Correction à: "Un crible généralisé" (Séminaire de Probabilités, VII (Univ. Strasbourg, Strasbourg, année universitaire 1971–1972), pp. 33–35, Lecture Notes in Math., Vol. 321, Springer, Berlin, 1973). **(80e:54052)**
Harazišvili, A. B. ★Некоторые вопросы теории множеств и теории меры. (Russian) [Questions in the theory of sets and in measure theory] **(80k:28001)**
Ho, S. M. F. (*with* Naimpally, S. A.) An abstract model for measure and category. **(80i:28003)**
Kuratowski, Kazimierz (*with* Mostowski, A. Włodzimierz) ★Teoria mnogości. (Polish) [Set theory] **(80a:04001)**
Louveau, Alain Notions élémentaires de théorie descriptive effective. **(80f:03054)**
Mauldin, R. Daniel Borel parametrizations. **(80j:54033)**
See also **Cenzer, Douglas, (80i:28010)**
Mostowski, A. Włodzimierz *See* **Kuratowski, Kazimierz, (80a:04001)**
Naimpally, S. A. *See* **Ho, S. M. F., (80i:28003)**
Novikov, P. S. ★Избранные труды. (Russian) [Selected works] **(80i:01017)**

04A20 Combinatorial [See also 05A05.]; filters

Baccara, Guy Sur les permutations d'un ensemble infini dénombrable, dont toute orbite essentielle est infinie. (English summary) **80a:04003**
Erdős, Paul (*with* Hajnal, A.) Embedding theorems for graphs establishing negative partition relations. **80g:04004**
Set-theoretic, measure-theoretic, combinatorial, and number-theoretic problems concerning point sets in Euclidean space. **80g:04005**
Hajnal, A. *See* **Erdős, Paul, 80g:04004**
Harazišvili, A. B. The Banach-Tarski paradox. (Russian. Georgian and English summaries) **80i:04005**
Henle, James M. γ-Ramsey and γ-ineffable cardinals. **80a:04004**
Jovanović, Aleksandar A note on ultrapower cardinality. **80d:04005**
Nosal, Eva Partition relations for denumerable ordinals. **80h:04005**
Rado, Richard Problems in combinatorial set theory. **80g:04006**
Ristow, Allan W. The existence of certain partitions on Cartesian products. **80i:04007**
Rudin, Mary Ellen *See* **Shelah, Saharon, 80k:04002**
Shelah, Saharon (*with* Rudin, Mary Ellen) Unordered types of ultrafilters. **80k:04002**
Smullyan, Raymond M. Trees and ball games. **80i:04008**
Stern, Jacques Arbres dont toutes les branches sont faiblement Cauchy. **80a:04005**
Stromberg, Karl The Banach-Tarski paradox. **80i:04006**
Węglorz, Bogdan Extensions of filters to Ulam filters. (Russian summary) **80m:04004**

Secondary classifications:

Baumgartner, James E. (*with* Galvin, Fred) Generalized Erdős cardinals and 0^*. **(80f:03051)**
Independence proofs and combinatorics. **(80b:03076)**
Broverman, S. (*with* Ginsburg, John; Kunen, Kenneth; Tall, Franklin D.) Topologies determined by σ-ideals on ω_1. **(80k:54004)**
Cater, F. S. (*with* Erdős, Paul; Galvin, Fred) On the density of λ-box products. **(80e:54004)**
van Douwen, Eric K. (*with* Lutzer, David J.) On the classification of stationary sets. **(80h:54038)**
Erdős, Paul *See* **Cater, F. S.; et al., (80e:54004)**
Frankl, Péter The Erdős-Ko-Rado theorem is true for $n = ckt$. **(80c:05014)**
Galvin, Fred *See* **Cater, F. S.; et al., (80e:54004)** *and* **Baumgartner, James E., (80f:03051)**
Ginsburg, John *See* **Broverman, S.; et al., (80k:54004)**
Jech, Thomas (*with* Prikry, Karel) Ideals over uncountable sets: application of almost disjoint functions and generic ultrapowers. **(80f:03059)**
Kakuda, Yuzuru Saturation of ideals and pseudo-Boolean algebras of ideals on sets. **(80d:06009)**
Kanamori, Akihiro On Vopěnka's and related principles. **(80e:03063)**
Ketonen, Jussi Open problems in the theory of ultrafilters. **(80i:03057)**
Kunen, Kenneth *See* **Broverman, S.; et al., (80k:54004)**
Lutzer, David J. *See* **van Douwen, Eric K., (80h:54038)**
Milliken, Keith R. A Ramsey theorem for trees. **(80j:05090)**
Nešetřil, Jaroslav Infinite precise objects. (Russian summary) **(80i:05061)**
Prikry, Karel *See* **Jech, Thomas, (80f:03059)**
di Prisco, Carlos A. (*with* Zwicker, William) A remark on Part*(κ, λ). (Spanish summary) **(80d:03048)**
Tall, Franklin D. *See* **Broverman, S.; et al., (80k:54004)**
Zwicker, William *See* **di Prisco, Carlos A., (80d:03048)**

04A25 Axiom of choice and equivalent propositions (Zorn's lemma, etc.) [See also 03E25.]

Cirulis, J. Superinductive classes. (Russian) **80b:04006**
Hiura, Masayuki A note on Hall's lemma. **80a:04006**
Hodges, Wilfrid Krull implies Zorn. **80f:04004**

Secondary classifications:

(Cantor, Georg) *See* **Medvedev, F. A., (80j:01021)**
Lembcke, Jörn Two extension theorems effectively equivalent to the axiom of choice. **(80j:03073)**
(Levi, Beppo) *See* **Moss, Barbara, (80j:01024)**
Medvedev, F. A. The axiom of choice in the works of G. Cantor on the theory of sets. (Russian) **(80j:01021)**
Moss, Barbara Beppo Levi and the axiom of choice. **(80j:01024)**

04A30 Continuum hypothesis, generalized continuum hypothesis [See also 03E50, 54A25.]

van Douwen, Eric K. (*with* van Mill, Jan) Parovičenko's characterization of $\beta\omega - \omega$ implies CH. **80b:04007**
van Mill, Jan *See* **van Douwen, Eric K., 80b:04007**
Yang, An Zhou The generalized continuum hypothesis with parameters and the axiom of choice. (Chinese. English summary) **80d:04006**

Secondary classifications:

Jech, Thomas (*with* Prikry, Karel) Ideals over uncountable sets: application of almost disjoint functions and generic ultrapowers. **(80f:03059)**
Lee, Ken W. A class of sets whose distance set fills an interval. **(80f:04003)**
Miller, Harry I. A universal null set whose Steinhaus distance set is $[0, \infty)$. (Serbo-Croatian summary) **(80e:28002)**
Prikry, Karel *See* **Jech, Thomas, (80f:03059)**

04A99 Miscellaneous topics

Cerruti, Umberto Non-Archimedean valued modules and non-Cantorian set theory. **80c:04006**
Lee, Ken W. The midpoint set of a Cantor set. **80b:04008**

Secondary classifications:

Asenjo, F. G. Leśniewski's work and nonclassical set theories. **(80a:03069)**
Higgs, Denis A universal characterization of $[0, \infty]$. **(80a:08007)**
Kimura, Nobuo A proof for the existence of a type with countable infinite relative types. **(80k:54042)**
(Leśniewski, Stanisław) *See* **Asenjo, F. G., (80a:03069)**
Skobelev, V. G. Irreducible sets of representatives of a family of sets. (Russian) **(80i:05005)**
State, Luminița Toward a theory of cluster analysis. **(80a:68117)**

05–XX COMBINATORICS {For finite fields, see 12Cxx.}

Erdős, Paul Problems and results in combinatorial analysis and combinatorial number theory. **80h:05001**
Algebraic combinatorics *See* **Unsolved problems, 80j:05001**
Burnaby, B.C. *See* **Unsolved problems, 80j:05001**
Problèmes:
Combinatorics Problèmes. **80g:05001**
Problems:
Algebraic combinatorics *See* **Unsolved problems, 80j:05001**
Summer Workshop:
Algebraic Combinatorics *See* **Unsolved problems, 80j:05001**
Unsolved problems ★Unsolved problems. **80j:05001**

05–01 Elementary exposition, textbooks

Agrawal, B. M. (*with* Agrawal, V. P.) A note on combinatorics. II. **80c:05001b**
Agrawal, V. P. A note on combinatorics. **80c:05001a**
See also **Agrawal, B. M., 80c:05001b**
Christofides, Nicos ★Теория графов. (Russian) [Graph theory] **80c:05002**
(Gavrilov, G. P.) *See* **Christofides, Nicos, 80c:05002**

Guinand, Andrew P. The umbral method: a survey of elementary mnemonic and manipulative uses. **80e:05001**
Jeger, Max Algorithmische Kombinatorik auf der Stufe programmierbarer Taschen-Rechner. (English summary) **80e:05002**
(Konoval'cev, I. V.) *See* **Christofides, Nicos, 80c:05002**
Lovász, László ★Combinatorial problems and exercises. **80m:05001**
Ore, Oystein ★Graphen und ihre Anwendungen. **80m:05002**
(Pollaczek, Gisela) *See* **Ore, Oystein, 80m:05002**
(Verikov, È. V.) *See* **Christofides, Nicos, 80c:05002**

Secondary classifications:

Behzad, Mehdi (*with* Chartrand, Gary; Lesniak-Foster, Linda M.) ★Graphs & digraphs. **(80f:05019)**
Bollobás, Béla ★Graph theory. **(80j:05053)**
Chartrand, Gary *See* **Behzad, Mehdi; et al., (80f:05019)**
Hamdan, M. A. A systematic approach to teaching counting formulae. (French summary) **(80a:60003)**
Hill, Anthony The continuous charms of discrete mathematics—some grassroot problems in Ars Combinatoria. (French summary) **(80i:05030)**
Lesniak-Foster, Linda M. *See* **Behzad, Mehdi; et al., (80f:05019)**
Wilson, Robin J. ★Introduction to graph theory. **(80g:05028)**

05–02 Advanced exposition (research surveys, monographs, etc.)

Aigner, Martin ★Combinatorial theory. **80h:05002**
Cameron, Peter J. Permutation groups on unordered sets. **80b:05001**
A combinatorial tool kit for permutation groups. **80d:05001**
Nešetřil, Jaroslav (*with* Rödl, Vojtěch) Partition (Ramsey) theory—a survey. **80e:05003**
Riordan, John ★Combinatorial identities. **80k:05001**
Rödl, Vojtěch *See* **Nešetřil, Jaroslav, 80e:05003**
Sačkov, V. N. ★Вероятностные методы в комбинаторном анализе. (Russian) [Probability methods in combinatorial analysis] **80g:05002**
Spencer, Joel H. Nonconstructive methods in discrete mathematics. **80f:05001**
Problems:
Combinatorics Problems. **80c:05003**

Secondary classifications:

(Andrews, George E.) *See* **MacMahon, Percy Alexander, (80k:01065)**
Bollobás, Béla ★Extremal graph theory. **(80a:05120)**
Erdős, Paul (*with* Sárközy, András) Some solved and unsolved problems in combinatorial number theory. **(80i:10001)**
MacMahon, Percy Alexander ★Collected papers. Vol. I. **(80k:01065)**
(Rota, Gian-Carlo) *See* **MacMahon, Percy Alexander, (80k:01065)**
Sárközy, András *See* **Erdős, Paul, (80i:10001)**
Sellers, Peter H. ★Combinatorial complexes. **(80m:68005)**
Wasserman, Stanley S. Models for binary directed graphs and their applications. **(80a:92001)**
Bibliography:
MacMahon, Percy Alexander *See* **MacMahon, Percy Alexander, (80k:01065)**
Collected papers:
MacMahon, Percy Alexander *See* **MacMahon, Percy Alexander, (80k:01065)**
Problems:
Graph theory Unsolved problems. **(80g:05029)**

05–03 Historical (must also be assigned at least one classification number from Section 01)

Biggs, Norman The roots of combinatorics. (French summary) **80h:05003**

Secondary classifications:

Agrawal, B. M. (*with* Agrawal, V. P.) A note on combinatorics. II. **(80c:05001b)**
Agrawal, V. P. A note on combinatorics. **(80c:05001a)**
See also **Agrawal, B. M., (80c:05001b)**
Federico, P. J. Squaring rectangles and squares. **(80h:05019)**
Bibliography:
Squaring rectangles and squares *See* **Federico, P. J., (80h:05019)**

05–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

Brudno, A. A. (*with* Faradžev, I. A.) A study of Ramsey graphs using computers. (Russian) **(80e:05083)**
Faradžev, I. A. *See* **Brudno, A. A., (80e:05083)**
Killgrove, R. B. *See* **Payne, S. E., (80c:05049)**
Kirton, H. C. (*with* Seberry, Jennifer) Generation of a frequency square orthogonal to a 10×10 Latin square. **(80m:05018)**
Laurière, Jean-Louis A language and a program for stating and solving combinatorial problems. **(80a:68075)**
Nijenhuis, Albert (*with* Wilf, Herbert S.) ★Combinatorial algorithms. **(80a:68076)**
Payne, S. E. (*with* Killgrove, R. B.) Generalized quadrangles of order sixteen. **(80c:05049)**
Regener, Eric Programming the Penrose pattern. **(80d:05019)**
Seberry, Jennifer *See* **Kirton, H. C., (80m:05018)**
Wilf, Herbert S. *See* **Nijenhuis, Albert, (80a:68076)**

05–06 Proceedings, conferences, etc.

(Balinski, M. L.) *See* **Polyhedral combinatorics, 80a:05003**
(Bondy, John Adrian) *See* **Graph theory and related topics, 80e:05004**
(Collatz, Lothar) *See* **Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, 80m:05003**
(Fulkerson, Delbert Ray) *See* **Polyhedral combinatorics, 80a:05003**
(Gewirtz, Allan) *See* **Conference: Combinatorial Mathematics, 80j:05003**
(Hajnal, A.) *See* **Combinatorics, 80a:05002a** *and* **Combinatorics, 80a:05002b**
(Hoffman, A. J.) *See* **Polyhedral combinatorics, 80a:05003**
(Hoffman, Frederick) *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004**
(Holton, D. A.) *See* **Combinatorial mathematics, 80a:05001**
(Horadam, A. F.) *See* **Combinatorial mathematics, 80j:05002**
(McCarthy, David) *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004**
(Meinardus, Günter) *See* **Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, 80m:05003**
(Mullin, Ronald C.) *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004**
(Murty, U. S. R.) *See* **Graph theory and related topics, 80e:05004**
(Quintas, Louis V.) *See* **Conference: Combinatorial Mathematics, 80j:05003**
(Ray-Chaudhuri, Dijen K.) *See* **Relations between combinatorics and other parts of mathematics, 80a:05005**
(Seberry, Jennifer) *See* **Combinatorial mathematics, 80a:05001**
(Sós, Vera T.) *See* **Combinatorics, 80a:05002a** *and* **Combinatorics, 80a:05002b**
(Stanton, Ralph G.) *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004**
(Tutte, William T.) *See* **Graph theory and related topics, 80e:05004**
(Wallis, W. D.) *See* **Combinatorial mathematics, 80j:05002**
(Wetterling, W.) *See* **Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, 80m:05003**
Armidale *See* **Combinatorial mathematics, 80j:05002**
Birthday:
Tutte, William Thomas *See* **Graph theory and related topics, 80e:05004**
Boca Raton, Fla. *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004**
Brussels *See* **Colloque: Mathématiques Discrètes: Codes et Hypergraphes, 80f:05002**
Canberra *See* **Combinatorial mathematics, 80a:05001**
Codes *See* **Colloque: Mathématiques Discrètes: Codes et Hypergraphes, 80f:05002**
Colloque:
CNRS, Problèmes Combinatoires et Théorie des Graphes *See* **Problèmes combinatoires et théorie des graphes, 80e:05005**
Mathématiques Discrètes: Codes et Hypergraphes ★Colloque Mathématiques Discrètes: Codes et Hypergraphes. **80f:05002**
Colloques Internationaux du Centre National de la Recherche Scientifique *See* **Problèmes combinatoires et théorie des graphes, 80e:05005**
Colloquia Mathematica Societatis János Bolyai *See* **Combinatorics, 80a:05002b**
Colloquium:
Hungarian, Combinatorics *See* **Combinatorics, 80a:05002a** *and* **Combinatorics, 80a:05002b**
Columbus, Ohio *See* **Relations between combinatorics and other parts of mathematics, 80a:05005**
Combinatorial mathematics ★Combinatorial mathematics. **80a:05001**
★Combinatorial mathematics. VI. **80j:05002**
See also **Conference: Combinatorial Mathematics, 80j:05003**
Combinatorial structures and graph theory ★Combinatorial structures and graph theory. II. (Japanese) **80f:05003**
Combinatorial theory *See* **Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, 80m:05003**
Combinatorics ★Combinatorics. Vol. I. **80a:05002a**
★Combinatorics. Vol. II. **80a:05002b**
See also **Polyhedral combinatorics, 80a:05003; Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004; Relations between combinatorics and other parts of mathematics, 80a:05005** *and* **Problèmes combinatoires et théorie des graphes, 80e:05005**
Computing *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004**
Conference:
Australian, Combinatorial Mathematics *See* **Combinatorial mathematics, 80j:05002**
Combinatorial Mathematics ★Second International Conference on Combinatorial Mathematics. **80j:05003**
Combinatorial Theory *See* **Combinatorial mathematics, 80a:05001**
Graph Theory and Related Topics *See* **Graph theory and related topics, 80e:05004**
Southeastern, Combinatorics, Graph Theory and Computing *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004**
Discrete mathematics *See* **Colloque: Mathématiques Discrètes: Codes et Hypergraphes, 80f:05002**
Graph theory *See* **Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 80a:05004; Problèmes combinatoires et théorie des graphes, 80e:05005; Combinatorial structures and graph theory, 80f:05003** *and* **Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, 80m:05003**
Graph theory and related topics ★Graph theory and related topics. **80e:05004**
Hypergraphs *See* **Colloque: Mathématiques Discrètes: Codes et Hypergraphes, 80f:05002**
Keszthely *See* **Combinatorics, 80a:05002a** *and* **Combinatorics, 80a:05002b**
Kyoto *See* **Combinatorial structures and graph theory, 80f:05003**
New York *See* **Conference: Combinatorial Mathematics, 80j:05003**
Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen
★Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen. Band 2. **80m:05003**

Oberwolfach *See* **Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, 80m:05003**
Orsay *See* **Problèmes combinatoires et théorie des graphes, 80e:05005**
Polyhedral combinatorics ★Polyhedral combinatorics. **80a:05003**
Problèmes combinatoires et théorie des graphes ★Problèmes combinatoires et théorie des graphes. **80e:05005**
Proceedings:
Southeastern Conference on Combinatorics, Graph Theory and Computing ★Proceedings of the Ninth Southeastern Conference on Combinatorics, Graph Theory, and Computing. **80a:05004**
Proceedings of Symposia in Pure Mathematics *See* **Relations between combinatorics and other parts of mathematics, 80a:05005**
Relations between combinatorics and other parts of mathematics ★Relations between combinatorics and other parts of mathematics. **80a:05005**
Symposium:
Combinatorial Structures and Graph Theory *See* **Combinatorial structures and graph theory, 80f:05003**
Tagung:
Numerische Methoden bei Graphentheoretischen und Kombinatorischen Problemen *See* **Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, 80m:05003**
Waterloo, Ont. *See* **Graph theory and related topics, 80e:05004**

Secondary classifications:

(Harary, Frank) *See* **Topics in graph theory, (80j:05056)**
(Ramachandra Rao, A.) *See* **Proceedings: Symposium on Graph Theory, (80j:05055)**
Calcutta *See* **Proceedings: Symposium on Graph Theory, (80j:05055)**
Graph theory *See* **Proceedings: Symposium on Graph Theory, (80j:05055)** *and* **Topics in graph theory, (80j:05056)**
New York *See* **Topics in graph theory, (80j:05056)**
Proceedings:
Symposium on Graph Theory ★Proceedings of the Symposium on Graph Theory. **(80j:05055)**
Symposium:
Graph Theory *See* **Proceedings: Symposium on Graph Theory, (80j:05055)**
Topics in graph theory ★Topics in graph theory. **(80j:05056)**

05Axx Classical combinatorial problems

Erdős, Paul Combinatorial problems in geometry and number theory. **80i:05001**

Secondary classifications:

Erdős, Paul Problems in number theory and combinatorics. **(80e:10005)**
Kobayashi, Takashi Combinatorial problems and their algorithms in operations research. (Japanese) **(80k:90015)**
Nijenhuis, Albert (*with* Wilf, Herbert S.) ★Combinatorial algorithms. **(80a:68076)**
Sačkov, V. N. ★Вероятностные методы в комбинаторном анализе. (Russian) [Probability methods in combinatorial analysis] **(80g:05002)**
Wilf, Herbert S. *See* **Nijenhuis, Albert, (80a:68076)**

05A05 Combinatorial choice problems (subsets, representatives, permutations)

Baranyai, Zsolt On a search problem of G. O. H. Katona. **80d:05002**
Bollobás, Béla (*with* Duchet, Pierre) Helly families of maximal size. **80j:05004**
Daykin, David E. Poset functions commuting with the product and yielding Chebychev type inequalities. (French summary) **80j:05005**
Deza, Mikhail (*with* Erdős, Paul; Frankl, Péter) Intersection properties of systems of finite sets. **80c:05004**
(*with* Erdős, Paul; Singhi, N. M.) Combinatorial problems on subsets and their intersections. **80e:05006**
Duchet, Pierre *See* **Bollobás, Béla, 80j:05004**
Erdős, Paul *See* **Deza, Mikhail; et al., 80c:05004** *and* **Deza, Mikhail; et al., 80e:05006**
Fomin, S. V. Finite, partially ordered sets and Young diagrams. (Russian) **80b:05002**
Frankl, Péter On a problem of Bondy and Hajnal. (French summary) **80h:05004**
Families of finite sets satisfying a union condition. **80i:05002**
See also **Deza, Mikhail; et al., 80c:05004**
Fredricksen, Harold (*with* Maiorana, James) Necklaces of beads in k colors and k-ary de Bruijn sequences. **80e:05007**
Garey, Michael R. (*with* Graham, R. L.; Johnson, David S.) On a number-theoretic bin packing conjecture. **80i:05003**
Graham, R. L. *See* **Garey, Michael R.; et al., 80i:05003**
Greene, Curtis (*with* Kleitman, Daniel J.) Proof techniques in the theory of finite sets. **80a:05006**
(*with* Hilton, A. J. W.) Some results on Sperner families. **80k:05002**
Gronau, Hans-Dietrich On Sperner families in which no 3 sets have an empty intersection. **80d:05003**
Gupta, Hansraj A new look at the permutations of the first n natural numbers. **80e:05008**
Hayasaka, Takanori *See* **Saito, Sadao, 80i:05004**
Higgs, Denis (*with* de Witte, Paul) On products of transpositions and their graphs. **80g:05003**
Hilton, A. J. W. *See* **Greene, Curtis, 80k:05002**
Johnson, David S. *See* **Garey, Michael R.; et al., 80i:05003**
Karpovsky, Mark G. (*with* Milman, V. D.) Coordinate density of sets of vectors. **80m:05004**
Khanna, Ravinder Kumar *See* **Sharma, Bhu Dev, 80k:05003**
Kleitman, Daniel J. *See* **Greene, Curtis, 80a:05006** *and* **West, Douglas B., 80i:05006**
Liang, Frank M. A short proof of the $3d$ distance theorem. **80j:05006**
Lipski, Witold, Jr. On strings containing all subsets as substrings. **80e:05009**
Livingston, M. L. An ordered version of the Erdős-Ko-Radó theorem. **80e:05010**
Maiorana, James *See* **Fredricksen, Harold, 80e:05007**
Milman, V. D. *See* **Karpovsky, Mark G., 80m:05004**
Nash-Williams, C. St. J. A. Another criterion for marriage in denumerable societies. **80m:05005**
Paillet, Jean-Luc A threshold property for intersections in a finite set. **80c:05005**
Pleasants, P. A. B. Addendum: "Rearrangements that preserve convergence" (J. London Math. Soc. (2) **15** (1977), no. 1, 134–142). **80c:05006**
Saito, Sadao (*with* Hayasaka, Takanori) The Langford $(4, n)$-sequence: a trigonometric approach. **80i:05004**
Sharma, Bhu Dev (*with* Khanna, Ravinder Kumar) On m-ary Gray codes. **80k:05003**
Singhi, N. M. *See* **Deza, Mikhail; et al., 80e:05006**
Skobelev, V. G. Irreducible sets of representatives of a family of sets. (Russian) **80i:05005**
Stahl, Saul Reductions of n-fold covers. **80a:05007**
Wang, Da Lun (*with* Wang, Ping) Some results about the Chvátal conjecture. **80b:05003**
Wang, Ping *See* **Wang, Da Lun, 80b:05003**
West, Douglas B. (*with* Kleitman, Daniel J.) Skew chain orders and sets of rectangles. **80i:05006**
de Witte, Paul *See* **Higgs, Denis, 80g:05003**
Zelinka, Bohdan A remark on the Čebyšev property. (Russian summary) **80k:05004**

Secondary classifications:

Alladi, K. (*with* Erdős, Paul; Hoggatt, Verner E., Jr.) On additive partitions of integers. **(80a:10025)**
Aslanjan, L. A. (*with* Karahanjan, V. M.; Torosjan, B. E.) The compactness of subsets of vertices of an n-dimensional unit cube. (Russian) **(80a:52014)**
Baumgartner, James E. Independence proofs and combinatorics. **(80b:03076)**
Boccara, Guy Sur les permutations d'un ensemble infini dénombrable, dont toute orbite essentielle est infinie. (English summary) **(80a:04003)**
Bolotnikov, Ju. V. (*with* Sačkov, V. N.; Tarakanov, V. E.) Some classes of random variables on cyclic permutations. (Russian) **(80e:60016)**
Carlitz, Leonard Permutations with prescribed pattern. II. Applications. **(80a:05009)**
Chan, Albert W. (*with* Francis, Richard L.) Some layout problems on the line with interdistance constraints and costs. **(80i:90051)**
DeMillo, Richard (*with* Dobkin, David P.; Lipton, Richard J.) Combinatorial inference. **(80b:68116)**
Dobkin, David P. *See* **DeMillo, Richard; et al., (80b:68116)**
Erdős, Paul *See* **Alladi, K.; et al., (80a:10025)**
Fisher, M. L. (*with* Nemhauser, George L.; Wolsey, L. A.) An analysis of approximations for maximizing submodular set functions. II. **(80d:90090)**
Francis, Richard L. *See* **Chan, Albert W., (80i:90051)**
Gioia, A. A. (*with* Subbarao, M. V.) The Scholz-Brauer problem in addition chains. II. **(80i:10078)**
Hansen, Rodney T. Fermat's theorem as a corollary to the multinomial theorem. **(80i:10014)**
Hoggatt, Verner E., Jr. *See* **Alladi, K.; et al., (80a:10025)**
Karahanjan, V. M. *See* **Aslanjan, L. A.; et al., (80a:52014)**
Lau, Dietlinde Über die Anzahl von abgeschlossnen Mengen linearer Funktionen der n-wertigen Logik. (English and Russian summaries) **(80c:03026)**
Lipton, Richard J. *See* **DeMillo, Richard; et al., (80b:68116)**
Maurey, Bernard Construction de suites symétriques. (English summary) **(80c:46020)**
McCarthy, Donald Locks, keys and majority voting. **(80e:90015)**
Mead, D. G. The average number of weighings to locate a counterfeit coin. **(80k:68030)**
Munro, J. Ian *See* **Robertson, Edward, (80i:90123)**
Nemhauser, George L. *See* **Fisher, M. L.; et al., (80d:90090)**
Robertson, Edward (*with* Munro, J. Ian) NP-completeness, puzzles and games. **(80i:90123)**
Rogers, D. G. Ascending sequences in permutations. **(80a:05020)**
Sačkov, V. N. *See* **Bolotnikov, Ju. V.; et al., (80e:60016)**
Schrijver, Alexander The linking of matroids by linking systems. **(80g:05026)**
Snapper, Ernst Characteristic polynomials of a permutation representation. **(80d:20016)**
Subbarao, M. V. *See* **Gioia, A. A., (80i:10078)**
Tarakanov, V. E. *See* **Bolotnikov, Ju. V.; et al., (80e:60016)**
Torosjan, B. E. *See* **Aslanjan, L. A.; et al., (80a:52014)**
Wolsey, L. A. *See* **Fisher, M. L.; et al., (80d:90090)**

05A10 Factorials, binomial coefficients, combinatorial functions

Carlitz, Leonard Further note on a binomial identity. (Serbo-Croatian summary) **80m:05006**
Comtet, Louis A multinomial generalization of a binomial identity. **80m:05007**
Dyer, Gerald A. *See* **Parker, E. T., 80g:05005**
Eplett, W. J. R. A note about the Catalan triangle. **80i:05007**
Foata, Dominique Distributions eulériennes et mahoniennes sur le groupe des permutations. **80e:05011**
Goulden, I. P. *See* **Stanton, Ralph G., 80g:05006**
Hô-Van-Hoà *See* **Lê Văn Thiêm, 80g:05004**
Jannelli, Virginia Liberto On a generalization of the Tartaglia triangle. (Italian. English summary) **80i:05008**
Johnson, Ellis L. (*with* Newman, Donald J.; Winston, Kenneth) An inequality on binomial coefficients. **80d:05004**
Klemm, Michael (*with* Wagner, Bernd) A matrix of combinatorial numbers related to the symmetric groups. **80k:05005**
Lê Văn Thiêm (*with* Hô-Van-Hoà) Sur certaines relations entre les coefficients binômiaux. **80g:05004**
Lovász, László (*with* Vesztergombi, K.) Restricted permutations and Stirling numbers. **80c:05007**

Lunnon, W. F. (*with* Pleasants, P. A. B.; Stephens, N. M.) Arithmetic properties of Bell numbers to a composite modulus. I. **80k:05006**
Newman, Donald J. *See* **Johnson, Ellis L.; et al., 80d:05004**
Parker, E. T. (*with* Dyer, Gerald A.) A problem with permutations. I. **80g:05005**
Pleasants, P. A. B. *See* **Lunnon, W. F.; et al., 80k:05006**
(Stanley, Richard P.) *See* **Foata, Dominique, 80e:05011**
Stanton, Ralph G. (*with* Goulden, I. P.) Some combinatorial polynomials arising from numerical analysis. **80g:05006**
Stephens, N. M. *See* **Lunnon, W. F.; et al., 80k:05006**
Tanny, Stephen M. (*with* Zuker, M.) Analytic methods applied to a sequence of binomial coefficients. **80a:05008**
Vesztergombi, K. *See* **Lovász, László, 80c:05007**
Wagner, Bernd *See* **Klemm, Michael, 80k:05005**
Winston, Kenneth *See* **Johnson, Ellis L.; et al., 80d:05004**
Wyss, Walter Quasimultiplication and polynomial sequences. **80m:05008**
Zuker, M. *See* **Tanny, Stephen M., 80a:05008**

Secondary classifications:

Carlitz, Leonard Generalized Stirling and related numbers. **(80b:10017)**
Charalambides, Ch. A. Some properties and applications of the differences of the generalized factorials. **(80j:33024)**
Conway, John H. (*with* Croft, H. T.; Erdős, Paul; Guy, M. J. T.) On the distribution of values of angles determined by coplanar points. **(80b:51021)**
Croft, H. T. *See* **Conway, John H.; et al., (80b:51021)**
Erdős, Paul (*with* Szekeres, George) Some number theoretic problems on binomial coefficients. **(80e:10010)**
See also **Conway, John H.; et al., (80b:51021)**
Guy, M. J. T. *See* **Conway, John H.; et al., (80b:51021)**
Hussain, M. A. (*with* Singh, S. N.) On generalized polynomial set $D_n(x; a, k)$. **(80b:10018)**
Kerber, Adalbert A matrix of combinatorial numbers related to the symmetric groups. **(80b:20006)**
Kinoshita, Kozo *See* **Sasao, Tsutomu, (80b:94044)**
Labelle, Gilbert Sur la décomposition des opérations en bits et en pits. **(80b:10008)**
Sasao, Tsutomu (*with* Kinoshita, Kozo) On the number of fanout-free functions and unate cascade functions. **(80b:94044)**
Singh, S. N. *See* **Hussain, M. A., (80b:10018)**
Steele, J. Michael Existence of submatrices with all possible columns. **(80f:05055)**
Szekeres, George *See* **Erdős, Paul, (80e:10010)**
Whitehead, Earl Glen, Jr. Autocorrelation of $(+1, -1)$ sequences. **(80e:05027)**

05A15 Combinatorial enumeration problems, generating functions

Abbott, Harvey (*with* Hanson, Denis) A lattice path problem. **80m:05009**
Barrett, Wayne W. An alternative approach to Laguerre polynomial identities in combinatorics. **80i:05009**
Bicknell-Johnson, Marjorie *See* **Hoggatt, Verner E., Jr., 80e:05015**
Borevič, Z. I. (*with* Więsław, Witold; Dobrowolski, E.; Rodionov, V. I.) The number of labeled topologies on nine points. (Russian) **80e:05012**
(*with* Bumagin, V. V.; Rodionov, V. I.) The number of labeled topologies on ten points. (Russian) **80f:05004**
Brown, James Ward On multivariable Sheffer sequences. **80j:05007**
Bumagin, V. V. *See* **Borevič, Z. I.; et al., 80f:05004**
Carlitz, Leonard Up-down and down-up partitions. **80d:05005**
Enumeration of certain weighted sequences. **80a:05010**
The number of derangements of a sequence with given specification. **80a:05011**
A note on q-Eulerian numbers. **80k:05007**
Permutations with prescribed pattern. II. Applications. **80a:05009**
Stirling pairs. **80m:05010**
See also **Cigler, Johann, 80b:05004**
Cerasoli, Mauro Binomial enumeration and compound stochastic Poisson processes. (Italian. English summary) **80k:05008**
Cigler, Johann A note on a paper by L. Carlitz: "A class of generating functions" (SIAM J. Math. Anal. 8 (1977), no. 3, 518–532). **80b:05004**
Dobrowolski, E. *See* **Borevič, Z. I.; et al., 80e:05012**
Garsia, Adriano M. (*with* Gessel, Ira) Permutation statistics and partitions. **80e:05013**
Gessel, Ira *See* **Garsia, Adriano M., 80e:05013**
Goulden, I. P. (*with* Jackson, D. M.) The enumeration of generalised alternating subsets with congruences. **80e:05014**
Hanson, Denis *See* **Abbott, Harvey, 80m:05009**
Hoggatt, Verner E., Jr. (*with* Bicknell-Johnson, Marjorie) Properties of generating functions of a convolution array. **80e:05015**
See also **Smith, Claudia, 80h:05006**
Jackson, D. M. (*with* Read, Ronald C.) A note on permutations without runs of given length. **80e:05016**
Some results on "product-weighted lead codes". **80a:05012**
See also **Goulden, I. P., 80e:05014**
Klarner, David A. Sets of words which omit specified words as subwords. **80b:05005**
Klove, Torleiv Noncovering of multiples. **80h:05005**
Kreweras, Germain Sur les extensions linéaires d'une famille particulière d'ordres partiels. (English summary) **80k:05009**
Lyle, Bill A linear-algebra problem from algebraic coding theory. **80a:05013**
Miller, Robert L. Necklaces, symmetries and self-reciprocal polynomials. **80e:05017**
Milne, Stephen C. A q-analog of restricted growth functions, Dobinski's equality, and Charlier polynomials. **80e:05018**
Moon, J. W. Some enumeration problems for similarity relations. **80j:05008**
Myerson, Gerald A combinatorial problem in finite fields. I. **80f:05010**
Narayana, T. V. Recent progress and unsolved problems in dominance theory. **80e:05019**
Narushima, Hiroshi A survey of enumerative combinatorial theory and a problem. **80i:05011**
Neggers, Joseph Counting finite posets. **80a:05014**
Peck, G. W. Short proof of a general weight Burnside lemma. **80g:05007**
Razen, R. A. Transversals and finite topologies. **80c:05008**
Read, Ronald C. *See* **Jackson, D. M., 80e:05016**
Rodionov, V. I. *See* **Borevič, Z. I.; et al., 80e:05012** *and* **Borevič, Z. I.; et al., 80f:05004**
Rogers, D. G. (*with* Shapiro, Louis W.) Some correspondences involving the Schröder numbers and relations. **80c:05009**
Pascal triangles, Catalan numbers and renewal arrays. **80g:05008**
See also **Temperley, H. N. V., 80e:05022**
Rota, Gian-Carlo Hopf algebra methods in combinatorics. (French summary) **80i:05012**
Sands, Arthur D. On generalised Catalan numbers. **80c:05010**
Shapiro, Louis W. *See* **Rogers, D. G., 80c:05009**
Singmaster, David Some Catalan correspondences. **80e:05020**
Smith, Claudia (*with* Hoggatt, Verner E., Jr.) Generating functions of central values in generalized Pascal triangles. **80h:05006**
Solomon, Louis Partially ordered sets with colors. **80c:05011**
Švartin, S. M. Cyclic sets. (Russian) **80e:05021**
Temperley, H. N. V. (*with* Rogers, D. G.) A note on Baxter's generalization of the Temperley-Lieb operators. **80e:05022**
Tyškevič, R. I. Enumeration of (0, 1)-matrices defined by the number of ones in rows and columns. (Russian. English summary) **80m:05011**
Viennot, Gérard Permutations ayant une forme donnée. (English summary) **80i:05013**
Więsław, Witold *See* **Borevič, Z. I.; et al., 80e:05012**

Secondary classifications:

Arczyński, Mirosław (*with* Borowiecki, Mieczysław; Sysło, Maciej M.) On Hallian digraphs, permanents and transversals. **(80k:15010)**
Borowiecki, Mieczysław *See* **Arczyński, Mirosław; et al., (80k:15010)**
Boyd, David W. (*with* Steele, J. Michael) Random exchanges of information. **(80i:60010)**
Chandon, J. L. (*with* Lemaire, J.; Pouget, J.) Dénombrement des quasi-ordres sur un ensemble fini. (English summary) **(80g:92039)**
Cordes, Craig M. A new type of combinatorial design. **(80a:05016)**
Devitt, John S. An enumerative approach to a problem in probability. **(80b:68047)**
Dumont, Dominique A combinatorial interpretation for the Schett recurrence on the Jacobian elliptic functions. **(80i:33003)**
Eplett, W. J. R. The small sample distribution of a Mann-Whitney type statistic for circular data. **(80d:62035)**
Faradžev, I. A. Constructive enumeration of combinatorial objects. (Russian) **(80c:05085)**
Foata, Dominique Distributions eulériennes et mahoniennes sur le groupe des permutations. **(80e:05011)**
A noncommutative version of the matrix inversion formula. **(80f:15006)**
Guibas, Leo J. (*with* Odlyzko, Andrew M.) Maximal prefix-synchronized codes. **(80d:94024)**
Harary, Frank From Euler's partitions to Cayley's rooted trees via Pólya's picture-writing. **(80c:05062)**
Hess, Paul Dedekind's problem: monotone Boolean functions on the lattice of divisors of an integer. **(80j:06010)**
Katchalski, Meir (*with* Liu, A. C.) Arcs on the circle and p-tuplets on the line. **(80f:52010)**
Kocay, W. L. *See* **Stanton, Ralph G., (80f:10006)**
Lascoux, Alain (*with* Schützenberger, Marcel Paul) Croissance des polynômes de Foulkes-Green. (English summary) **(80d:20052)**
Lemaire, J. *See* **Chandon, J. L.; et al., (80g:92039)**
Light, F. W., Jr. Enumeration of truncated Latin rectangles. **(80c:05037)**
Liu, A. C. *See* **Katchalski, Meir, (80f:52010)**
McKay, Brendan D. Backtrack programming and isomorph rejection on ordered subsets. **(80a:68033)**
Mullen, Gary L. Equivalence classes of matrices over finite fields. **(80g:15016)**
Nemeth, Evi (*with* Seberry, Jennifer; Shu, Michael) On the distribution of the permanent of cyclic (0, 1) matrices. **(80m:15004)**
Odlyzko, Andrew M. *See* **Guibas, Leo J., (80d:94024)**
Pouget, J. *See* **Chandon, J. L.; et al., (80g:92039)**
Schützenberger, Marcel Paul *See* **Lascoux, Alain, (80d:20052)**
Seberry, Jennifer *See* **Nemeth, Evi; et al., (80m:15004)**
Shapiro, Louis W. The cycle of six. **(80j:05058)**
Shu, Michael *See* **Nemeth, Evi; et al., (80m:15004)**
(Stanley, Richard P.) *See* **Foata, Dominique, (80e:05011)**
Stanton, Ralph G. (*with* Kocay, W. L.) Computational bounds for a combinatorial sum. **(80f:10006)**
Steele, J. Michael *See* **Boyd, David W., (80i:60010)**
Sysło, Maciej M. *See* **Arczyński, Mirosław; et al., (80k:15010)**
Wille, Detlef Enumeration of self-complementary structures. **(80e:05070)**

05A17 Partitions [See also 10A45.]

Andrews, George E. Plane partitions. II. The equivalence of the Bender-Knuth and MacMahon conjectures. **80d:05006b**
Plane partitions. I. The MacMahon conjecture. **80d:05006a**
Plane partitions. III. The weak Macdonald conjecture. **80j:05009**
Clements, G. F. The minimal number of basic elements in a multiset antichain. **80a:05015**
Cordes, Craig M. A new type of combinatorial design. **80a:05016**
Furstenberg, Harry (*with* Weiss, Benjamin) Topological dynamics and combinatorial number theory. **80g:05009**
Gupta, Hansraj The rank-vector of a partition. **80a:05017**

Hindman, Neil Simultaneous idempotents in $\beta\mathbb{N}\setminus\mathbb{N}$ and finite sums and products in N. **80f:05005**

Hirschhorn, M. D. Some partition theorems of the Rogers-Ramanujan type. **80j:05010**

Kim, Ki Hang (*with* Roush, Fred W.) A conjecture of Recski in combinatorial set theory. **80b:05006**

Klugman, J. F. C. The representation of partition structures. **80a:05018**

Roush, Fred W. *See* **Kim, Ki Hang, 80b:05006**

Weiss, Benjamin *See* **Furstenberg, Harry, 80g:05009**

Secondary classifications:

Alexanderson, Gerald L. (*with* Wetzel, John E.) Simple partitions of space. **(80e:51013)**

Andrews, George E. (*with* Askey, Richard) Enumeration of partitions: the role of Eulerian series and q-orthogonal polynomials. **(80b:10021)**

(*with* Askey, Richard) A simple proof of Ramanujan's summation of the ${}_1\psi_1$. **(80b:33004)**

Connection coefficient problems and partitions. **(80c:33004)**

Askey, Richard *See* **Andrews, George E., (80b:10021)** *and* **Andrews, George E., (80b:33004)**

Beutelspacher, Albrecht Partitions of finite vector spaces: an application of the Frobenius number in geometry. **(80a:05068)**

Bhat-Nayak, Vasanti N. *See* **Rao, Siddani Bhaskara; et al., (80m:05077)**

Bressoud, D. M. On a partition theorem of Göllnitz. **(80a:10027)**

Brucker, P. On the complexity of clustering problems. **(80a:68036)**

Canfield, E. Rodney On the location of the maximum Stirling number(s) of the second kind. **(80a:05021)**

Carlitz, Leonard Up-down and down-up partitions. **(80d:05005)**

Cohen, Gérard (*with* Montaron, Bernard) Empilements parfaits de boules dans les espaces vectoriels binaires. (English summary) **(80b:94027)**

Grassl, R. M. (*with* Hillman, A. P.) Functions on tableau frames. **(80k:05028)**

Hillman, A. P. *See* **Grassl, R. M., (80k:05028)**

Hindman, Neil Partitions and sums and products of integers. **(80b:10022)**

Konvalina, John (*with* Kosloski, Rodney H.) A combinatorial algorithm for generating cyclic quasi-Hadamard matrices. **(80a:05040)**

Kosloski, Rodney H. *See* **Konvalina, John, (80a:05040)**

Metropolis, N. (*with* Rota, Gian-Carlo) Combinatorial structure of the faces of the n-cube. **(80c:06015)**

Montaron, Bernard *See* **Cohen, Gérard, (80b:94027)**

Naik, Ranjan N. *See* **Rao, Siddani Bhaskara; et al., (80m:05077)**

Palm, Christine (*with* Simões-Pereira, J. M. S.) Edge sets of hypergraphs with a B_q-like property and partition numbers of graphs. **(80c:05105)**

Rao, Siddani Bhaskara (*with* Bhat-Nayak, Vasanti N.; Naik, Ranjan N.) Characterization of frequency partitions of Eulerian graphs. **(80m:05077)**

Rota, Gian-Carlo *See* **Metropolis, N., (80c:06015)**

Sagan, Bruce An analog of Schensted's algorithm for shifted Young tableaux. **(80k:05029)**

Simões-Pereira, J. M. S. *See* **Palm, Christine, (80c:05105)**

Tanaev, V. S. The optimal separation of a finite set into subsets. (Russian. English summary) **(80b:68060)**

Optimal decomposition of a partially ordered set into chains. (Russian. English summary) **(80m:06003)**

Wetzel, John E. *See* **Alexanderson, Gerald L., (80e:51013)**

05A19 Combinatorial identities

Andreescu, Titu *See* **Andrica, Dorin, 80j:05011**

Andrica, Dorin (*with* Andreescu, Titu) On certain classes of identities. (Romanian) **80j:05011**

d'Antona, Ottavio (*with* Rota, Gian-Carlo) Two rings connected with the inclusion-exclusion principle. **80b:05007**

Bicknell-Johnson, Marjorie *See* **Hoggatt, Verner E., Jr., 80e:05023**

Carlitz, Leonard Some product-sum identities. **80a:05019**

Degenerate Stirling, Bernoulli and Eulerian numbers. **80i:05014**

Cohen, M. E. (*with* Sun, H. S.) On some extensions of the Wang-Carlitz identity. **80k:05010**

(*with* Sun, H. S.) Some extensions of the Brock-Carlitz identity. **80i:05015**

Foata, Dominique A matrix analog for Viennot's construction of the Robinson correspondence. **80k:05011**

Gould, Henry W. Evaluation of sums of convolved powers using Stirling and Eulerian numbers. **80b:05007**

Operational formulas for unusual Fibonacci series. **80b:05008**

Hoggatt, Verner E., Jr. (*with* Bicknell-Johnson, Marjorie) Convolution arrays for Jacobsthal and Fibonacci polynomials. **80e:05023**

Kalai, Gil A note on an evaluation of Abel sums. **80j:05012**

Majhi, S. N. (*with* Shankara, T. S.) Transformations of some non-commuting operator monomials. **80e:05024**

Perry, E. L. Distance between partitions on a finite set. **80c:05012**

Rogers, D. G. Ascending sequences in permutations. **80a:05020**

Rota, Gian-Carlo *See* **d'Antona, Ottavio, 80b:05007**

Segal, S. L. Combinatorial identities associated with $\exp \zeta(z)$. **80f:05006a**

Corrigendum: "Combinatorial identities associated with $\exp \zeta(z)$" [Utilitas Math. 14 (1978), 65–79]. **80f:05006b**

Shankara, T. S. *See* **Majhi, S. N., 80e:05024**

Sun, H. S. *See* **Cohen, M. E., 80i:05015** *and* **Cohen, M. E., 80k:05010**

Secondary classifications:

Bernstein, Leon Applications of units. **(80e:12007)**

Bicknell-Johnson, Marjorie *See* **Hoggatt, Verner E., Jr., (80e:05015)**

Carlitz, Leonard The number of derangements of a sequence with given specification. **(80a:05011)**

Further note on a binomial identity. (Serbo-Croatian summary) **(80m:05006)**

Comtet, Louis A multinomial generalization of a binomial identity. **(80m:05007)**

Hirschhorn, M. D. Some partition theorems of the Rogers-Ramanujan type. **(80j:05010)**

Hoggatt, Verner E., Jr. (*with* Bicknell-Johnson, Marjorie) Properties of generating functions of a convolution array. **(80e:05015)**

Riordan, John ★Combinatorial identities. **(80k:05001)**

Stone, David A. Notes on "A combinatorial formula for $P_1(X)$". **(80g:57034)**

Todorov, Kaltscho Die $\mathfrak{D}$-Klassen der endlichen symmetrischen Halbgruppen und ihre Mächtigkeiten. **(80e:20081)**

Uhrin, B. On two combinatorial identities useful in linear inequalities. **(80d:52014)**

Wetzel, John E. On the division of the plane by lines. **(80e:51014)**

05A20 Combinatorial inequalities

Ahlswede, Rudolf (*with* Daykin, David E.) Inequalities for a pair of maps $S \times S \to S$ with S a finite set. **80b:05009**

Beck, Jon M. A concentration problem in combinatorial number theory. **80c:05013**

Canfield, E. Rodney On the location of the maximum Stirling number(s) of the second kind. **80a:05021**

Daykin, David E. *See* **Ahlswede, Rudolf, 80b:05009**

Frankl, Péter The Erdős-Ko-Rado theorem is true for $n = ckt$. **80c:05014**

A Sperner-type theorem for families of finite sets. **80g:05010**

Ilori, Samuel A. An inequality for complete symmetric functions. **80c:05015**

Ismail, Mourad E.-H. (*with* Tamhankar, M. V.) A combinatorial approach to some positivity problems. **80i:05016**

Li, Shuo-Yen Robert Extremal theorems on divisors of a number. **80f:05007**

Moran, P. A. P. A curious finite sum. **80a:05022**

Ruzsa, I. Z. On the cardinality of $A+A$ and $A-A$. **80c:05016**

Tamhankar, M. V. *See* **Ismail, Mourad E.-H., 80i:05016**

Secondary classifications:

Abbott, Harvey (*with* Hanson, Denis) A lattice path problem. **(80m:05009)**

Ball, A. H. (*with* Cummings, L. J.) Lower bounds for $CF(n, 6)$ codes. **(80m:94068)**

Bollobás, Béla (*with* Duchet, Pierre) Helly families of maximal size. **(80j:05004)**

Cummings, L. J. *See* **Ball, A. H., (80m:94068)**

Duchet, Pierre *See* **Bollobás, Béla, (80j:05004)**

Hanson, Denis *See* **Abbott, Harvey, (80m:05009)**

Igarashi, Y. The size of arrays for a prime implicant generating algorithm. **(80m:68031)**

Marques de Sá, E. Imbedding conditions for λ-matrices. **(80g:15017)**

05A99 None of the above, but in this section

Assous, R. (*with* Pouzet, Maurice) Une caractérisation des mots périodiques. **80k:05012**

Avramënok, A. K. The theory of operators (n-dimensional case) in combinatorial analysis. (Russian) **80c:05017**

Barker, Wayne G. The unsolved d'Agapeyeff cipher. **80k:05013**

Baron, Gerd (*with* Schinzel, A.) An extension of Wilson's theorem. **80e:05025**

Bumby, R. (*with* Fisher, R.; Levinson, H.; Silverman, Ruth) Topologies on finite sets. **80b:05008**

Burmester, M. (*with* Forcade, R.; Jacobs, E.) Circles of numbers. **80a:05023**

Butler, Kim Ki-Hang (*with* Roush, Fred) Words with prescribed adjacencies. **80f:05008**

Carlitz, Leonard A recurrence suggested by a combinatorial problem. **80c:05018**

Cummings, L. J. On the construction of Thue sequences. **80j:05013**

Fisher, R. *See* **Bumby, R.; et al., 80b:05008**

Forcade, R. *See* **Burmester, M.; et al., 80a:05023**

Freeman, J. M. New solutions to the Rota/Mullin problem of connection constants. **80c:05019**

Jacobs, E. *See* **Burmester, M.; et al., 80a:05023**

Levinson, H. *See* **Bumby, R.; et al., 80b:05008**

Nurlybaev, A. N. The neighborhood of the element in the problem of overlapping Cartesian products. (Russian) **80d:05007**

Pouzet, Maurice *See* **Assous, R., 80k:05012**

Roush, Fred *See* **Butler, Kim Ki-Hang, 80f:05008**

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Silverman, Ruth *See* **Bumby, R.; et al., 80b:05008**

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05B10 Difference sets (number-theoretic, group-theoretic, etc.) [See also 10L05.]

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05B15 Orthogonal arrays, Latin squares, Room squares

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05B20 Matrices (incidence, Hadamard, etc.)

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Verheiden, Eric Integral and rational completions of combinatorial matrices. **80a:05045**
de Vroedt, C. *See* **Roos, C., 80d:05015**
Wallis, W. D. *See* **Cooper, Joan; et al., 80c:05043** *and* **Hedayat, A., 80e:05037**
Yang, Chao Hui Hadamard matrices, finite sequences, and polynomials defined on the unit circle. **80k:05024**
Zaĭcenko, V. A. (*with* Faradžev, I. A.) Algorithms for checking the canonicity of incidence systems. (Russian) **80a:05046**

Secondary classifications:

Abian, Alexander (*with* Salbany, Sergio) Wallman compactification and matrices of zeroes and ones. **80f:54016**
Blake, Ian F. (*with* Melkman, Avraham A.) On an inverse for sections of a binomial matrix. **80a:15017**
Bridges, W. G. Algebraic duality theorems with combinatorial applications. **80a:05049**
Cameron, Peter J. (*with* Delsarte, Philippe; Goethals, Jean-Marie) Hemisystems, orthogonal configurations, and dissipative conference matrices. **80k:05027**
de Concini, Corrado Symplectic standard tableaux. **80m:14036**
Delsarte, Philippe *See* **Cameron, Peter J.; et al., 80k:05027**
Goethals, Jean-Marie *See* **Cameron, Peter J.; et al., 80k:05027**
Mahmoodian, Ebadollah S. A critical case method of proof in combinatorial mathematics. **80d:05046**
McEliece, Robert J. (*with* Rodemich, E. R.; Rumsey, H. C., Jr.) The Lovász bound and some generalizations. **80a:05168**
Melkman, Avraham A. *See* **Blake, Ian F., 80a:15017**
Rodemich, E. R. *See* **McEliece, Robert J.; et al., 80a:05168**
Rumsey, H. C., Jr. *See* **McEliece, Robert J.; et al., 80a:05168**
Salbany, Sergio *See* **Abian, Alexander, 80f:54016**

05B25 Finite geometries [See also 51D20, 51Exx.]

Baker, Ronald D. An elliptic semiplane. **80a:05047**
Barnabei, Marilena On arcs with weighted points. **80f:05025**
Bose, R. C. (*with* Krier, Nicholas) Note on an embeddability problem of Erdős. **80g:05020**
Chan, Agnes Hui (*with* Ray-Chaudhuri, Dijen K.) Characterization of "linegraph of an affine space". **80m:05020**
Denig, W. A. *See* **Dowling, T. A., 80f:05017**
Dowling, T. A. (*with* Denig, W. A.) Geometries associated with partially ordered sets. **80f:05017**
Drake, David A. (*with* Jungnickel, Dieter) Klingenberg structures and partial designs. I. Congruence relations and solutions. **80d:05017a**
(*with* Jungnickel, Dieter) Klingenberg structures and partial designs. II. Regularity and uniformity. **80d:05017b**
Dunbar, Jean (*with* Laskar, Renu) Finite nets of dimension d. **80f:05018**
Heise, Werner Es gibt keinen optimalen $(n+2, 3)$-Code einer ungeraden Ordnung n. **80c:05039**
Hill, Raymond Caps and codes. **80a:05048**
Hirschfeld, J. W. P. (*with* Hubaut, Xavier; Thas, J. A.) Sets of type $(1, n, q+1)$ in finite projective spaces of even order q. **80e:05040**
Houck, David J. (*with* Paul, Michael E.) On a theorem of de Bruijn and Erdős. **80k:05013**
Hubaut, Xavier *See* **Hirschfeld, J. W. P.; et al., 80e:05040**
Jungnickel, Dieter On an assertion of Dembowski. **80e:05041**
See also **Drake, David A., 80d:05017a** *and* **Drake, David A., 80d:05017b**
Kászonyi, L. An example for geometries having property $K(4)$ and being not four-colourable. **80c:05042**
On half-planar geometries. **80f:05026**
Kelly, Douglas G. (*with* Kennedy, Daniel) The Higgs factorization of a geometric strong map. **80g:05021**
Kennedy, Daniel *See* **Kelly, Douglas G., 80g:05021**
Killgrove, R. B. *See* **Payne, S. E., 80c:05049**
Krier, Nicholas *See* **Bose, R. C., 80g:05020**
Laskar, Renu *See* **Dunbar, Jean, 80f:05018**
Limaye, B. V. (*with* Sane, S. S.) On partial designs and m-uniform projective Hjelmslev planes. **80e:05043**
Paul, Michael E. *See* **Houck, David J., 80k:05013**
Payne, S. E. (*with* Killgrove, R. B.) Generalized quadrangles of order sixteen. **80c:05049**
Pellegrino, Giuseppe Some elementary arithmetical propositions and their application to the k-arcs theory. (Italian. English summary) **80j:05027**
Ray-Chaudhuri, Dijen K. *See* **Chan, Agnes Hui, 80m:05020**
Samardžiski, Aleksandar A construction of 2-$(v, 4, 1)$ designs. (Macedonian. English summary) **80j:05028**
Sane, S. S. *See* **Limaye, B. V., 80e:05043**
Thas, J. A. *See* **Hirschfeld, J. W. P.; et al., 80e:05040**
Totten, Jim A classification of linear spaces based on quadrangles. II. **80g:05022**
Whiteley, Walter Logic and invariant theory. IV. Invariants and syzygies in combinatorial geometry. **80g:05023**

Secondary classifications:

Assmus, E. F., Jr. (*with* Salwach, Chester J.) The (16, 6, 2) designs. **(80g:05014b)**
Baker, Ronald D. Polarities of elliptic semiplanes. **(80g:51003)**
Barnabei, Marilena (*with* Zucchini, Cristina) Abstract arcs of type (m, n). (Italian. English summary) **(80e:51008)**
Brunwell, Dennis A note on k-3 caps in three-dimensional Galois space. **(80e:51010)**
Brylawski, Tom The broken-circuit complex. **(80a:05055)**
Buekenhout, Francis The geometry of diagrams. **(80b:51005)**
Cameron, Peter J. Permutation groups on unordered sets. **(80b:05001)**
Ebert, Gary L. Amusing configurations of disjoint circles. **(80h:51007)**
Faudree, R. J. (*with* Rousseau, C. C.; Sheehan, J.) More from the good book. **(80h:05038)**
Geck, Renate R. The nonexistence of optimal $(q+2, 3)$-codes of order $q=5$ and $q=7$. **(80m:94058)**
Heise, Werner (*with* Quattrocchi, Pasquale) Survey on sharply k-transitive sets of permutations and Minkowski-m-structures. **(80m:51006)**
Johnson, N. L. The geometry of $GL(2, q)$ in translation planes of even order q^2. **(80e:51006)**
Jungnickel, Dieter Regular Hjelmslev planes. II. **(80j:51009b)**
Regular Hjelmslev planes. **(80j:51009a)**
Korchmáros, Gabrielle On translation ovals in a Galois plane of even order. (Italian. English summary) **(80i:51012)**
A group property of the plane involutions that permute into themselves an oval in a finite projected plane. (Italian. English summary) **(80c:51012)**
Kuppuswamy Rao, K. *See* **Narayana Rao, M. L., (80g:51010)**
Laskar, Renu (*with* Thas, J. A.) On some generalizations of partial geometry. **(80g:51011)**
Liebler, Robert A. A note on the Hering-Ott planes. **(80b:51002)**
Lorea, Michel On Turán hypergraphs. **(80f:05053)**
Mezzaroba, Joseph A. *See* **Salwach, Chester J., (80g:05014a)**
Mogi, Sasako *See* **Retkin, Harry, (80j:05048)**
Mullin, Ronald C. (*with* Stanton, Ralph G.) A covering problem in binary spaces of finite dimension. **(80g:05018)**
Murty, U. S. R. (*with* Simon, Imre) A β-function that is not a sum of rank functions of matroids. (French summary) **(80j:05044)**
Narayana Rao, M. L. (*with* Kuppuswamy Rao, K.) A translation plane of order 25 and its full collineation group. **(80g:51010)**
Pellegrino, Giuseppe An observation on the problem of complete k-arcs in $S_{2,q}$ with $q \equiv 1 \pmod 4$. (Italian. English summary) **(80d:51011)**
Quattrocchi, Pasquale *See* **Heise, Werner, (80m:51006)**
Retkin, Harry (*with* Mogi, Sasako) Some combinatorial identities on matroids. (French summary) **(80j:05048)**
Rousseau, C. C. *See* **Faudree, R. J.; et al., (80h:05038)**
Salwach, Chester J. (*with* Mezzaroba, Joseph A.) The four known biplanes with $k=11$. **(80g:05014a)**
See also **Assmus, E. F., Jr., (80g:05014b)**
Seberry, Jennifer A class of group-divisible designs. **(80e:05032)**
Sheehan, J. *See* **Faudree, R. J.; et al., (80h:05038)**
Simon, Imre *See* **Murty, U. S. R., (80j:05044)**
Sprague, Alan P. Incidence structures with specified planes. **(80b:51001)**
Stanton, Ralph G. *See* **Mullin, Ronald C., (80g:05018)**
Teirlinck, Luc On Steiner spaces. **(80j:51011)**
Thas, J. A. Combinatorics of partial geometries and generalized quadrangles. **(80h:51012)**
Generalized quadrangles satisfying at least one of the Moufang conditions. **(80i:51015)**
See also **Laskar, Renu, (80g:51011)**
Tverberg, Helge Squaring the square and other combinatorial geometry. I. (Norwegian. English summary) **(80g:51008a)**
Squaring the square and other combinatorial geometry. II. (Norwegian. English summary) **(80g:51008b)**
Vincenti, Rita A transformation of a Desarguesian plane over a field of even characteristic. (Italian) **(80i:51013)**
Zucchini, Cristina *See* **Barnabei, Marilena, (80e:51008)**

05B30 Other designs, configurations [See also 51E30.]

Anderson, B. A. (*with* Gross, K. B.) A partial starter construction. **80k:05026**
(*with* Gross, K. B.; Leonard, Philip A.) Some Howell designs of prime side. **80m:05021**
Baker, Ronald D. Quasigroups and tactical systems. **80d:05018**
Bannai, Eiichi On tight spherical designs. **80b:05013**
On some spherical t-designs. **80j:05029**
(*with* Damerell, R. M.) Tight spherical designs. I. **80b:05014**
Bermond, Jean-Claude (*with* Kotzig, Anton; Turgeon, Jean M.) On a combinatorial problem of antennas in radioastronomy. **80h:05014**
(*with* Huang, Charlotte; Sotteau, D.) Balanced cycle and circuit designs: even cases. **80c:05050**
Bridges, W. G. Algebraic duality theorems with combinatorial applications. **80a:05049**
Cameron, Peter J. (*with* Delsarte, Philippe; Goethals, Jean-Marie) Hemisystems, orthogonal configurations, and dissipative conference matrices. **80k:05027**
Chandak, M. L. A note on construction of higher associate partially balanced ternary designs. **80h:05015**
Cohen, Daniel I. A. On the combinatorial antipodal-point lemmas. **80j:05030**
Damerell, R. M. *See* **Bannai, Eiichi, 80b:05014**
Debroey, I. (*with* Thas, J. A.) On semipartial geometries. **80a:05050**
De Clerck, F. (*with* Thas, J. A.) Note on the extension of restricted (r, λ)-designs. **80j:05031**
Debon, Michel Planar Steiner triple systems. **80b:05015**
Delsarte, Philippe *See* **Cameron, Peter J.; et al., 80k:05027**
Duijvestijn, A. J. W. Simple perfect squared square of lowest order. **80a:05051**
A lowest order simple perfect 2×1 squared rectangle. **80j:05032**
Eades, Peter (*with* Seberry, Jennifer) Some asymptotic results for orthogonal designs. II. (French summary) **80j:05033**
Eggleton, R. B. (*with* Hartman, A.) A note on equidistant permutation arrays. **80c:05051**

Goethals, Jean-Marie Schémas d'association et designs sphériques. **80j:05034**
See also **Cameron, Peter J.; et al., 80k:05027**
Grassl, R. M. (*with* Hillman, A. P.) Functions on tableau frames. **80k:05028**
Greene, Curtis (*with* Nijenhuis, Albert; Wilf, Herbert S.) A probabilistic proof of a formula for the number of Young tableaux of a given shape. **80b:05016**
Gross, K. B. *See* **Anderson, B. A., 80k:05026** *and* **Anderson, B. A.; et al., 80m:05021**
Hanfi, A. R. Magic squares of fifth and sixth orders. **80a:05052**
Hartman, A. *See* **Eggleton, R. B., 80c:05051**
Hillman, A. P. *See* **Grassl, R. M., 80k:05028**
Huang, Charlotte *See* **Bermond, Jean-Claude; et al., 80c:05050**
Hughes, Daniel R. Biplanes and semi-biplanes. **80c:05052**
Kocdwell, A. D. Uniform P-circuit designs, quasigroups, and Room squares. **80c:05053**
Kotzig, Anton *See* **Bermond, Jean-Claude; et al., 80h:05014**
Kovalev, M. M. Polyhedral semimatroids. (Russian. English summary) **80j:05035**
Leeflang, K. W. H. Magic cubes of prime order. **80e:05044**
Leonard, Philip A. *See* **Anderson, B. A.; et al., 80m:05021**
Lindner, Charles C. (*with* Phelps, K. T.) A note on partial parallel classes in Steiner systems. **80c:05054**
(*with* Rosa, Alexander) Steiner quadruple systems—a survey. **80c:05055**
Ljah, I. V. Classification of configurations of rank eight. (Russian) **80j:05036**
Machala, František Über projektive Erweiterung affiner Klingenbergscher Ebenen. **80b:05017**
Maghout, Khaled Un problème de rangement. (English summary) **80j:05037**
Markvartová, Jitka On improper collineations of k-nets. (Czech. English and Russian summaries) **80a:05053**
McCarthy, David (*with* Singhi, N. M.; Vanstone, S. A.) A graph-theoretical approach to embedding $(r, 1)$-designs. **80j:05038**
Mendelsohn, N. S. A class of combinatorial quasigroups. **80b:05018**
Mullin, Ronald C. A survey of extremal (r, λ)-systems and certain applications. **80c:05056**
Nijenhuis, Albert *See* **Greene, Curtis; et al., 80b:05016**
Phelps, K. T. *See* **Lindner, Charles C., 80c:05054**
Rosa, Alexander *See* **Lindner, Charles C., 80c:05055**
Segan, Bruce An analog of Schensted's algorithm for shifted Young tableaux. **80k:05029**
Seberry, Jennifer *See* **Eades, Peter, 80j:05033**
Singhi, N. M. *See* **McCarthy, David; et al., 80j:05038**
Sotteau, D. *See* **Bermond, Jean-Claude; et al., 80c:05050**
Stephanides, Adam *See* **Usiskin, Zalman, 80i:05027**
Taylor, Paul Counting lines and planes in generalised noughts and crosses. **80m:05022**
Thas, J. A. *See* **Debroey, I., 80a:05050** *and* **De Clerck, F., 80j:05031**
Turgeon, Jean M. *See* **Bermond, Jean-Claude; et al., 80h:05014**
Usiskin, Zalman (*with* Stephanides, Adam) Magic triangular regions of order 4 and 5. **80i:05027**
Vanstone, S. A. Generalized Room squares and related combinatorial designs. **80g:05024**
See also **McCarthy, David; et al., 80j:05038**
Wilf, Herbert S. *See* **Greene, Curtis; et al., 80b:05016**

Secondary classifications:

Beljavskaja, G. B. (*with* Murathudjaev, S.) About admissibility of N-ary quasigroups. **(80g:20087)**
Chan, Y. K. (*with* Siu, M. K.; Tong, Po) Two-dimensional binary arrays with good autocorrelation. **(80j:94029)**
Csima, J. Embedding partial idempotent d-ary quasigroups. **(80e:20088)**
Fomin, S. V. Finite, partially ordered sets and Young diagrams. (Russian) **(80b:05002)**
Geramita, Anthony V. (*with* Geramita, Joan M.) Complex orthogonal designs. **(80a:05035)**
Geramita, Joan M. *See* **Geramita, Anthony V., (80a:05035)**
Giles, Jack, Jr. Infinite-level replicating dissections of plane figures. **(80g:51013a)**
Construction of replicating superfigures. **(80g:51013b)**
Superfigures replicating with polar symmetry. **(80g:51013c)**
Heinrich, Katherine (*with* Van Rees, G. H. J.; Wallis, W. D.) A general construction for equidistant permutation arrays. **(80k:05021)**
Karzel, Helmut (*with* Kroll, Hans-Joachim) Zur projektiven Einbettung von Inzidenzräumen mit Eigentlichkeitsbereich. **(80k:51002)**
Klove, Torleiv On the no-three-in-line problem. III. **(80d:05020)**
Kotzig, Anton (*with* Turgeon, Jean M.) β-valuations of regular graphs with complete components. **(80g:05056)**
Kroll, Hans-Joachim *See* **Karzel, Helmut, (80k:51002)**
Kurek, H. E. (*with* Petrenjuk, A. Ja.) Covering of graphs with stars. (Russian) **(80f:05037)**
Lorimer, Peter Maximal sets of permutations constructed from projective planes. **(80k:05023)**
Metropolis, N. (*with* Rota, Gian-Carlo) Combinatorial structure of the faces of the n-cube. **(80c:06015)**
Murathudjaev, S. *See* **Beljavskaja, G. B., (80g:20087)**
Oates-Williams, Sheila (*with* Street, Anne Penfold) The analysis of colour symmetry. **(80i:20021)**
Petrenjuk, A. Ja. *See* **Kurek, H. E., (80f:05037)**
Purdy, George B. (*with* Strommer, Thomas O.) The maximal sizes of faces and vertices in an arrangement. **(80j:51003)**
Rota, Gian-Carlo *See* **Metropolis, N., (80c:06015)**
Rusza, I. Z. (*with* Szemerédi, Endre) Triple systems with no six points carrying three triangles. **(80c:05116)**
Schulz, Christoph An invertible 3-diagram with 8 vertices. **(80k:52002)**
Siu, M. K. *See* **Chan, Y. K.; et al., (80j:94029)**
Sterboul, François Sur le nombre transversal des hypergraphes uniformes. (English summary) **(80e:05087)**
Street, Anne Penfold *See* **Oates-Williams, Sheila, (80i:20021)**
Strommer, Thomas O. *See* **Purdy, George B., (80j:51003)**
Szemerédi, Endre *See* **Rusza, I. Z., (80c:05116)**
Tong, Po *See* **Chan, Y. K.; et al., (80j:94029)**
Turgeon, Jean M. *See* **Kotzig, Anton, (80g:05056)**
Vanden Eynden, Charles Countable sequenceable groups. **(80b:20045)**
Van Rees, G. H. J. *See* **Heinrich, Katherine; et al., (80k:05021)**
Wallis, W. D. *See* **Heinrich, Katherine; et al., (80k:05021)**

05B35 Matroids, geometric lattices

Babai, László Vector representable matroids of given rank with given automorphism group. **80a:05054**
Bixby, Robert E. On Reid's characterization of the ternary matroids. **80k:05030**
Brylawski, Tom The broken-circuit complex. **80a:05055**
Cordovil, R. (*with* Las Vergnas, Michel) Géometries simpliciales unimodulaires. **80j:05039**
Cunningham, W. H. Binary matroid sums. **80k:05032**
Deza, Mikhail Configurations géométriques parfaites. **80k:05033**
Fujishige, Satoru Matroid theory and its application to systems engineering problems. (Japanese) **80k:05034**
Grötschel, Martin Facetten von Matroid-Polytopen. **80g:05025**
Győri, Ervin Comparison of infinite matroids. (Hungarian) **80a:05056**
(*with* Milner, E. C.) A theorem of the transversal theory for matroids of finite character. **80k:05019**
On the structures induced by bipartite graphs and infinite matroids. **80j:05041**
Hausmann, Dirk *See* **Körte, Bernhard, 80a:05057** *and* **Körte, Bernhard, 80b:05021**
Huguet, Danièle (*with* Tamari, Dov) La structure polyédrale des complexes de parenthésages. **80h:05016**
Ingleton, A. W. Transversal matroids and related structures. **80b:05020**
Jaeger, F. Interval matroids and graphs. **80k:05035**
A note on sub-Eulerian graphs. **80k:05036**
Körte, Bernhard (*with* Hausmann, Dirk) Eine Analyse der Greedy-Heuristik für Unabhängigkeitssysteme. **80b:05021**
(*with* Hausmann, Dirk) An analysis of the greedy heuristic for independence systems. **80a:05057**
Kung, Joseph P. S. Bimatroids and invariants. **80c:05057**
Alternating basis exchanges in matroids. **80a:05058**
Las Vergnas, Michel Extensions ponctuelles d'une géométrie combinatoire orientée. (English summary) **80i:05028**
See also **Cordovil, R., 80j:05039**
Lindström, Bernt On the chromatic number of regular matroids. **80b:05022**
Nonregular simplicial matroids. **80j:05040**
Lorea, Michel Hypergraphes et matroïdes. (English summary) **80j:05042**
Mason, J. H. Matroids as the study of geometrical configurations. **80k:05037**
Matthews, Laurence Duality in independence systems. **80j:05043**
McDiarmid, Colin Blocking, antiblocking, and pairs of matroids and polymatroids. **80a:05059**
Milner, E. C. *See* **Győri, Ervin, 80b:05019**
Mogi, Sasako *See* **Retkin, Harry, 80j:05048**
Murty, U. S. R. (*with* Simon, Imre) A β-function that is not a sum of rank functions of matroids. (French summary) **80j:05044**
Nguyen, Hien Q. Projections and weak maps in combinatorial geometries. **80a:05060**
Weak cuts of combinatorial geometries. **80j:05045**
Oublia, Lia Localisation d'une propriété du graphe des bases d'un matroïde binaire. (English summary) **80j:05046**
Oxley, James G. Infinite matroids. **80a:05061**
On cographic regular matroids. **80e:05045**
On a packing problem for infinite graphs and independence spaces. **80j:05047**
Purdy, George B. Triangles in arrangements of lines. **80k:05017**
Recski, András Decompositions of a graphic matroid. **80k:05038**
Retkin, Harry (*with* Mogi, Sasako) Some combinatorial identities on matroids. (French summary) **80j:05048**
Schmidt, Rüdiger On the existence of uncountably many matroidal families. **80i:05029**
Schrijver, Alexander The linking of matroids by linking systems. **80g:05026**
Seymour, P. D. Matroid representation over GF(3). **80k:05031**
Simon, Imre *See* **Murty, U. S. R., 80j:05044**
Strommer, Thomas O. The number of lines determined by a polygon. **80k:05018**
Tamari, Dov *See* **Huguet, Danièle, 80h:05016**
Vámos, P. The missing axiom of matroid theory is lost forever. **80a:05062**

Secondary classifications:

Andreae, Thomas Matroidal families of finite connected nonhomeomorphic graphs exist. **(80a:05160)**
Astié-Vidal, Annie Groupes d'automorphismes des graphes d'intersection aux bases d'un matroïde. **(80k:05063)**
Ball, Michael O. (*with* Nemhauser, George L.) Matroids and a reliability analysis problem. **(80g:90057)**
Camerini, P. M. (*with* Maffioli, F.) Heuristically guided algorithm for k-parity matroid problems. **(80e:68070)**
Duffin, Richard J. (*with* Morley, T. D.) Wang algebra and matroids. **(80a:94067)**
Földes, Stéphane (*with* Hammer, Peter L.) On a class of matroid-producing graphs. **(80c:05110)**
Hammer, Peter L. *See* **Földes, Stéphane, (80c:05110)**
Hilton, A. J. W. Dimension in linear spaces. (French summary) **(80g:51012)**
Las Vergnas, Michel An extension of Tutte's 1-factor theorem. **(80a:05166)**
Maffioli, F. *See* **Camerini, P. M., (80e:68070)**
Matthews, Laurence Matroids on the edge sets of directed graphs. **(80a:05103)**
Morley, T. D. *See* **Duffin, Richard J., (80a:94067)**
Nemhauser, George L. *See* **Ball, Michael O., (80g:90057)**

Recski, András Matroidal structure of n-ports. **(80b:94051)**
Contributions to the n-port interconnection problem by means of matroids. **(80c:94018)**
Sakarovitch, M. Quelques théorèmes de dualité combinatoire. (English summary) **(80l:90103)**

05B40 Packing and covering [See also 10E30, 52A45.]

Brouwer, A. E. Optimal packings of K_4's into a K_n. **80j:05049**
Coffman, E. G., Jr. (*with* Leung, Joseph Y.-T.; Ting, D.) Bin-packing problems and their applications in storage and processor allocation. **80k:05039**
Holton, D. A. (*with* Rickard, John A.) Brick packing. **80c:05058**
Kotjar, B. D. Packings of rectangular parallelotopes. (Russian. English summary) **80a:05063**
Leung, Joseph Y.-T. *See* **Coffman, E. G., Jr.; et al., 80k:05039**
Plesnevič, G. S. (*with* Saparov, M. S.) The average number of exact coverings. (Russian. English summary) **80k:05040**
Rickard, John A. *See* **Holton, D. A., 80c:05058**
Robinson, Raphael M. Multiple tilings of n-dimensional space by unit cubes. **80g:05027**
Saparov, M. S. *See* **Plesnevič, G. S., 80k:05040**
Ting, D. *See* **Coffman, E. G., Jr.; et al., 80k:05039**
Woodall, D. R. Menger and König systems. **80a:05064**

Secondary classifications:

Barnes, F. W. Packing the maximum number of $m \times n$ tiles in a large $p \times q$ rectangle. **(80j:05050)**
Cohen, Gérard (*with* Montaron, Bernard) Empilements parfaits de boules dans les espaces vectoriels binaires. (English summary) **(80b:94027)**
Deza, Mikhail (*with* Erdős, Paul; Singhi, N. M.) Combinatorial problems on subsets and their intersections. **(80e:05006)**
Erdős, Paul *See* **Deza, Mikhail; et al., (80e:05006)**
Frankl, Péter Families of finite sets satisfying a union condition. **(80i:05002)**
Hill, Raymond Packing problems in Galois geometries over GF(3). **(80c:51013)**
Montaron, Bernard *See* **Cohen, Gérard, (80b:94027)**
Schlüter, Klaus Kreispackung in Quadraten. **(80c:52014)**
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Geoffroy, Dennis P. On 1-factors of point determining graphs. **(80g:05055)**

Gerwert, Dieter Measuring the similarity of complex structures by means of graph grammars. **(80e:68166)**

Goodey, P. R. (*with* Rosenfeld, Moshe) Hamiltonian circuits in prisms over certain simple 3-polytopes. **(80e:05076)**

Grace, E. E. Refinable maps on graphs are near homeomorphisms. **(80m:54022)**

Győri, Ervin On division of graphs to connected subgraphs. **(80e:05074)**

Hajnal, A. *See* **Erdős, Paul, (80g:04004)**

Homenko, M. P. (*with* Ševčenko, E. N.) On the problem of identifying and enumerating. II. (Russian) **(80f:05051)**
(*with* Vivrot, T. M.) Properties of the matrix of independent cycles of a graph. (Russian) **(80f:05061)**

Howorka, Edward On metric properties of certain clique graphs. **(80i:05032)**

Javorskaja, M. I. An algorithm for partitioning graphs into subgraphs in the topological estimate of circuits by parts. (Russian. English summary) **(80d:94038)**

Lysenko, N. V. Chromatic properties of a class of graphs that triangulate a sphere. (Russian) **(80f:05044)**

Matula, David W. Subgraph connectivity numbers of a graph. **(80a:05123)**

Mougeot, Michel *See* **Auray, Jean-Paul; et al., (80g:90107)**

Nishizeki, Takao On the relationship between the genus and the cardinality of the maximum matchings of a graph. **(80g:05057)**

Pachner, Udo Schnitt- und Überdeckungszahlen kombinatorischer Sphären. **(80c:57004)**

Rosenberg, Ivo G. *See* **Deza, Mikhail, (80k:05041)**

Rosenfeld, Moshe *See* **Goodey, P. R., (80e:05076)**

Roth, B. *See* **Asimow, L., (80i:57004a)** *and* **Asimow, L., (80i:57004b)**

Ruscitti, Aldo Some results of Grünbaum and Motzkin: dual versions and new developments. (Italian. English summary) **(80g:05042)**

Ševčenko, E. N. A group of the KVP-graph. (Russian) **(80f:05050)**
See also **Homenko, M. P., (80f:05051)**

Straight, H. Joseph Cochromatic number and the genus of a graph. **(80b:05030)**

Tretkoff, Carol (*with* Tretkoff, Marvin) On a theorem of Rimhak Ree about permutations. **(80g:20004)**

Tretkoff, Marvin *See* **Tretkoff, Carol, (80g:20004)**

Vivrot, T. M. *See* **Homenko, M. P., (80f:05061)**

Wilson, Steve The smallest nontoroidal chiral maps. **(80b:57007)**

05C15 Chromatic theory of graphs and maps

Akopjan, G. C. (*with* Galstjan, O. A.) Classes of graphs that are critical with respect to coverings. (Russian. Armenian and English summaries) **80m:05030**

Aksenov, V. A. On uniquely 3-colorable planar graphs. **80a:05087**
(*with* Mel'nikov, L. S.) Essay on the theme: the three-color problem. **80c:05067**

Allaire, Frank Another proof of the four colour theorem. I. **80m:05031**
(*with* Swart, Edward Reinier) A systematic approach to the determination of reducible configurations in the four-color conjecture. **80f:05041**

Andersen, Lars Døvling Lower bounds on the cover-index of a graph. **80g:05032**

Baclawski, Kenneth Homology and graphs. (French summary) **80m:05032**

Benedict, James M. (*with* Chinn, Phyllis Zweig) On graphs having prescribed clique number, chromatic number, and maximum degree. **80g:05033**

Beraha, Saul Asymptotic formulae for BL regular maps. **80i:05042**
(*with* Kahane, Joseph) Is the four-color conjecture almost false? **80j:05061**

Berge, Claude The multicolorings of graphs and hypergraphs. **80a:05088**

Berman, David M. Critical graphs for acyclic colorings. **80b:05027**

Berman, Gerald Decomposition of graph functions. **80c:05068**

Bernhart, Arthur Chromatic equations. **80m:05033**

Bernhart, Frank R. Planar colorings: a theory. **80k:05052**

Bland, Robert G. (*with* Huang, H. C.; Trotter, L. E., Jr.) Graphical properties related to minimal imperfection. **80g:05034**

Bollobás, Béla Chromatic number, girth and maximal degree. **80e:05058**
(*with* Thomason, Andrew) Set colourings of graphs. **80g:05035**

Bosák, Juraj How the four-color problem was solved. (Slovak) **80k:05053**

Broere, I. (*with* Mynhardt, C. M.) Remarks on the critical graph conjecture. **80k:05024**
Graph-theoretic coloring problems. (Afrikaans. English summary) **80m:05034**

Brualdi, Richard A. The chromatic index of the graph of the assignment polytope. **80a:05089**

Burštein, M. I. Every 4-valent graph has an acyclic 5-coloring. (Russian. Georgian and English summaries) **80m:05035**

Catlin, Paul A. A bound on the chromatic number of a graph. **80a:05090a**
Another bound on the chromatic number of a graph. **80a:05090b**
Brooks' graph-coloring theorem and the independence number. **80k:05054**

Chao, Chong Yun (*with* Whitehead, Earl Glen, Jr.) Chromatically unique graphs. **80m:05036**

Chen, C. C. (*with* Hilton, A. J. W.) A 4-colour conjecture for planar graphs. **80f:05043**

Chinn, Phyllis Zweig *See* **Benedict, James M., 80g:05033**

Christen, Claude A. (*with* Selkow, Stanley M.) Some perfect coloring properties of graphs. **80k:05055**

Cockayne, E. J. Domination of undirected graphs—a survey. **80g:05036**

Deming, Robert W. Acyclic orientations of a graph and chromatic and independence numbers. **80k:05056**

Droesbeke, Fernand (*with* de Frenne, Anne) Étude des bornes du nombre chromatique d'un graphe. I. (English summary) **80k:05057a**
(*with* de Frenne, Anne) Étude des bornes du nombre chromatique d'un graphe. II. (English summary) **80k:05057b**

Duchet, Pierre Colorations transitives des graphes. (English summary) **80m:05037**

Duke, Richard A. Some extremal problems for simple two-complexes. **80a:05091**

Ferch, H. (*with* Richmond, L. Bruce) A numerical study of chromatic polynomials. **80j:05062**

Flamčík, Jozef The acyclic chromatic class of a graph. (Russian. English summary) **80c:05069**

Földes, Stéphane The rotor effect can alter the chromatic polynomial. **80c:05070**

de Frenne, Anne *See* **Droesbeke, Fernand, 80k:05057a** *and* **Droesbeke, Fernand, 80k:05057b**

Galstjan, O. A. *See* **Akopjan, G. C., 80m:05030**

Giraud, Georges Une majoration du nombre T de triangles tricolores dans tout k-coloriage des arêtes de K_n, pour $k=3$ ou 4. (English summary) **80m:05038**

Gol'dberg, M. K. Trivalent graphs with chromatic index 4. (Russian. Georgian and English summaries) **80m:05039**

Goodman, Jacob Eli (*with* Onishi, Hironori) Even triangulations of S^3 and the coloring of graphs. **80a:05092**

Gupta, Ram Prakash An edge-coloration theorem for bipartite graphs with applications. **80d:05023**

Hadžiivanov, Nikolai G. (*with* Nenov, N. D.) Sharpening of a theorem of Greenwood and Gleason on the colorings of the edges of a complete graph with nine vertices. (Russian) **80d:05024**
See also **Nenov, N. D., 80m:05043**

Hall, Dick Wick Rochromials and the colourings of circuits. **80j:05063**

Hansen, Pierre Upper bounds for the stability number of a graph. **80m:05040**

Harary, Frank (*with* Hsu, Derbiau; Miller, Zevi) The bichromaticity of a tree. **80a:05093**

Hilton, A. J. W. Embedding incomplete Latin rectangles and extending the edge colourings of graphs. **80k:05058**

(*with* Jones, Rhys Price) Partitioning the edges of a graph. **80m:05041**
See also **Chen, C. C., 80f:05043**

Holton, D. A. (*with* Purcell, S.) The four colour theorem—a short history. **80b:05028**
Hou, Derbiau *See* **Harary, Frank; et al., 80a:05093**
Huang, H. C. *See* **Bland, Robert G.; et al., 80g:05034**
Jones, Rhys Price *See* **Hilton, A. J. W., 80m:05041**
Kahane, Joseph *See* **Beraha, Sami, 80j:05061**
Kostočka, A. V. Degree, girth and chromatic number. **80c:05071**
Lawrence, Jim Covering the vertex set of a graph with subgraphs of smaller degree. **80a:05094**
Levow, Roy B. Coloring restrictions. **80c:05072**
Locrinc, Beatrice Chromatic uniqueness of the generalized θ-graph. **80a:05095**
Lysenko, N. V. Chromatic properties of a class of graphs that triangulate a sphere. (Russian) **80f:05044**
The number of graph colorings. (Russian) **80f:05045**
Mayer, Jean Une propriété des graphes minimaux dans le problème des quatre couleurs. (English summary) **80m:05042**
Mel'nikov, L. S. *See* **Aksionov, V. A., 80c:05067**
Miller, Zevi *See* **Harary, Frank; et al., 80a:05093**
Mitchem, John A short proof of Catlin's extension of Brooks' theorem. **80b:05029**
Müller, Vladimír On colorings of graphs without short cycles. **80b:05025**
Mynhardt, C. M. *See* **Broere, I., 80h:05024**
Neeralagi, Prabha S. *See* **Sampathkumar, E.; et al., 80j:05064**
Nenov, N. D. (*with* Hadžiivanov, Nikolaĭ G.) The Graham-Spencer number. (Russian) **80m:05043**
See also **Hadžiivanov, Nikolaĭ G., 80d:05024**
Nešetřil, Jaroslav (*with* Rödl, Vojtěch) A selective theorem for graphs and hypergraphs. (French summary) **80m:05044**
Onishi, Hironori *See* **Goodman, Jacob Eli, 80a:05092**
Parthasarathy, K. R. (*with* Ravindra, G.) The validity of the strong perfect-graph conjecture for (K_4-e)-free graphs. **80m:05045**
Plesník, Ján Bounds on chromatic numbers of multiple factors of a complete graph. **80a:05096**
Purcell, S. *See* **Holton, D. A., 80b:05028**
Ravindra, G. Perfectness of normal products of graphs. **80m:05046**
See also **Parthasarathy, K. R., 80m:05045**
Richmond, L. Bruce *See* **Ferch, H., 80j:05062**
Rödl, Vojtěch *See* **Nešetřil, Jaroslav, 80m:05044**
Roman, Steven A problem on multi-colorings of graphs. **80a:05097**
Sampathkumar, E. (*with* Neeralagi, Prabha S.; Venkatachalam, C. V.) A generalization of the chromatic and line chromatic numbers of a graph. **80j:05064**
Schrijver, Alexander Vertex-critical subgraphs of Kneser graphs. **80g:05037**
Selkow, Stanley M. *See* **Christen, Claude A., 80k:05055**
Shearer, J. B. A property of the colored complete graph. **80e:05059**
Speranza, Francesco Sur les colorations des graphes orientés. (Italian summary) **80k:05059**
Steinple, Joel G. The four color problem. **80m:05047**
Straight, H. Joseph Cochromatic number and the genus of a graph. **80b:05030**
Swart, Edward Reinier *See* **Allaire, Frank, 80i:05041**
Thomason, Andrew *See* **Bollobás, Béla, 80g:05035**
Toft, Bjarne An investigation of colour-critical graphs with complements of low connectivity. **80a:05098**
Trotter, L. E., Jr. *See* **Bland, Robert G.; et al., 80g:05034**
Tutte, William T. Sommes chromatiques. (English summary) **80m:05048**
On a pair of functional equations of combinatorial interest. **80h:05026**
Colouring problems. **80g:05038**
Venkatachalam, C. V. *See* **Sampathkumar, E.; et al., 80j:05064**
Whitehead, Earl Glen, Jr. *See* **Chao, Chong Yun, 80m:05036**
Woodall, D. R. The four-colour theorem. **80c:05073**
Wormald, Nicholas C. A 4-chromatic graph with a special plane drawing. **80k:05060**
Zelinka, Bohdan On a problem of R. Häggkvist concerning edge-colourings of graphs. (Russian summary) **80a:05099**

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Abbott, Harvey (*with* Liu, A. C.) The existence problem for colour critical linear hypergraphs. **80f:05070**
Alladi, K. (*with* Erdős, Paul; Hoggatt, Verner E., Jr.) On additive partitions of integers. **80a:10025**
Avis, David On minimal 5-chromatic triangle-free graphs. **80k:05069**
Baranyai, Zsolt Some applications on equalized matrices. **80d:05039**
Beck, Jon M. On 3-chromatic hypergraphs. **80e:05085**
Benzaken, C. Post's closed systems and the weak chromatic number of hypergraphs. **80a:05154**
Brylawski, Tom The broken-circuit complex. **80a:05055**
Durre, Karl Approximate algorithms for coloring large graphs. **80j:68052**
Edwards, C. S. Complete subgraphs with largest sum of vertex degrees. **80j:05075**
Erdős, Paul *See* **Alladi, K.; et al., 80a:10025**
Faber, V. (*with* Laver, Richard; McKenzie, R.) Coverings of groups by abelian subgroups. **80f:20042**
Germa, A. Decomposition of the edges of a complete t-uniform directed hypergraph. **80e:05086**
Greenwell, Don Odd cycles and perfect graphs. **80d:05044**
Grimmett, G. R. The rank polynomials of large random lattices. **80a:60129**
Hoggatt, Verner E., Jr. *See* **Alladi, K.; et al., 80a:10025**
Homenko, M. P. φ-transformations, topology and algebra of graphs. (Russian) **80f:05026**
Homenko, V. P. (*with* Lysenko, N. V.) Necessary and sufficient conditions for n-colorings of graphs. (Russian) **80f:05032**
Jungerman, Mark *See* **Pengelley, David J., 80f:05039**
Laver, Richard *See* **Faber, V.; et al., 80f:20042**
Lindström, Bernt On the chromatic number of regular matroids. **80b:05022**
Lipton, Richard J. (*with* Miller, Raymond E.) A batching method for coloring planar graphs. **80d:68041**
Liu, A. C. *See* **Abbott, Harvey, 80f:05070**
Lovász, László On minimax theorems of combinatorics. (Hungarian) **80a:05157**
Lysenko, N. V. *See* **Homenko, V. P., 80f:05032**
McKenzie, R. *See* **Faber, V.; et al., 80f:20042**
Miller, Raymond E. *See* **Lipton, Richard J., 80d:68041**
Pavlenko, V. A. The average number of internal commutators. (Russian. English summary) **80a:05117**
Pengelley, David J. (*with* Jungerman, Mark) Index four orientable embeddings and case zero of the Heawood conjecture. **80f:05039**
Schaefer, Thomas J. The complexity of satisfiability problems. **80d:68058**
Simmons, Gustavus J. (*with* Wetzel, John E.) A two-coloring inequality for Euclidean two-arrangements. **80k:51009**
Stahl, Saul Reductions of n-fold covers. **80a:05007**
Sterboul, François Smallest 3-graphs having a 3-colored edge in every k-coloring. **80k:05081**
Thomason, Andrew Hamiltonian cycles and uniquely edge colourable graphs. **80e:05077**
de Werra, D. Partial compactness in edge-chromatic scheduling. **80i:90061**
Wetzel, John E. *See* **Simmons, Gustavus J., 80k:51009**
Wheeler, William H. The first order theory of N-colorable graphs. **80g:03035**

05C20 Directed graphs (digraphs)

Abdul-Kader, Issam Caractérisation et propriétés des tournois réguliers. **80b:05031**
Alspach, Brian (*with* Reid, K. B.) Degree frequencies in digraphs and tournaments. **80a:05100**
Bang, Chang M. (*with* Sharp, Henry, Jr.) Score vectors of tournaments. **80d:05025**
Beineke, Lowell W. (*with* Harary, Frank) Consistency in marked digraphs. **80d:05026**
See also **Ringeisen, Richard D., 80d:05027**
Berkowitz, H. W. Restricted Eulerian circuits in directed graphs. **80c:05074**
Berman, Kenneth A. Directed faces in planar digraphs and unicoloured faces in edge 2-coloured planar Eulerian maps. **80a:05101**
An-Eulerian digraphs and the determination of those Eulerian digraphs having an odd number of directed Eulerian paths. **80c:05075**
Spanning arborescences, ingraphs, and outgraphs. **80h:05027**
Bigalke, Anton (*with* Köhler, Norbert) Antigerichtete Hamiltonlinien in vollständig gerichteten Graphen. **80m:05049**
Bogomolov, S. A. Minimal identifiers of the vertices of a graph. (Russian) **80e:05060**
Chaty, G. On critically and minimally k-vertex (arc) strongly connected digraphs. **80e:05061**
(*with* Chein, M.) Une nouvelle caractérisation des circuits composés. (English summary) **80j:05065**
Chein, M. *See* **Chaty, G., 80j:05065**
Chen, Kun Yuan (*with* Saaty, Thomas L.) Hoover's problem. **80c:05076**
Chen, Pei De Minimal number of comparisons of one kind of partially ordered graphs. (Chinese. English summary) **80j:05066**
Ciobotaru, Sorin On the enumeration of Hamiltonian roads and circuits in certain partial graphs of K_n^*. **80j:05067**
Cogis, Olivier Sur la dimension d'un graphe orienté. (English summary) **80c:05077**
Eplett, W. J. R. Self-converse tournaments. **80j:05068**
Erdős, Paul *See* **Trotter, William T., Jr., 80e:05063**
Evstigneev, V. A. A local algorithm for finding the bicomponents in a directed graph. (Russian) **80b:05032**
Frank, András (*with* Gyárfás, A.) How to orient the edges of a graph? **80c:05078**
Friedlander, Richard J. (*with* Gordon, Basil; Miller, Michael D.) On a group sequencing problem of Ringel. **80c:05079**
Gaul, Wolfgang Some structural properties of project digraphs. **80k:05061**
Giles, Rick Facets and other faces of branching polyhedra. **80i:05043**
Gordon, Basil *See* **Friedlander, Richard J.; et al., 80c:05079**
Guan, Mei Gu A method for finding the minimum arborescence of the directed graphs arising in the channel design problem. (Chinese) **80j:05069**
Gyárfás, A. *See* **Frank, András, 80c:05078**
Harary, Frank (*with* Robinson, Robert W.; Wormald, Nicholas C.) Isomorphic factorisations. V. Directed graphs. **80m:05050**
See also **Beineke, Lowell W., 80d:05026**
Hirayama, Kazuo *See* **Matsui, Kineo, 80j:05070**
Hirschberg, D. S. (*with* Wong, C. K.) Upper and lower bounds for graph-diameter problems with application to record allocation. **80k:05062**
Köhler, Norbert *See* **Bigalke, Anton, 80m:05049**
Linial, Nathan Covering digraphs by paths. **80f:05046**
Lucchesi, Cláudio L. (*with* Younger, D. H.) A minimax theorem for directed graphs. **80c:05062**
Marcu, Dănuț A method for finding the kernel of a digraph. **80a:05102**
Matsui, Kineo (*with* Hirayama, Kazuo) Some properties of the minimum feedback arc set for a directed graph. **80j:05070**
Matthews, Laurence Matroids on the edge sets of directed graphs. **80a:05103**
Miller, Michael D. *See* **Friedlander, Richard J.; et al., 80c:05079**
Moon, J. W. Tournaments whose subtournaments are irreducible or transitive. **80h:05028**
Nebeský, Ladislav A projectivity theorem for weakly connected digraphs. **80a:05104**
Orlin, James B. Line-digraphs, arborescences, and theorems of Tutte and Knuth. **80a:05105**
Pouzet, Maurice Sur certains tournois reconstructibles. Application à leurs groupes d'automorphismes. **80b:05033**
Reid, K. B. *See* **Alspach, Brian, 80a:05100**
Ringeisen, Richard D. (*with* Beineke, Lowell W.) The crossing number of $C_3\times C_n$. **80d:05027**

Robinson, Robert W. *See* **Harary, Frank; et al., 80m:05050**
Saaty, Thomas L. *See* **Chen, Kun Yuan, 80c:05076**
Sharp, Henry, Jr. *See* **Bang, Chang M., 80d:05025**
Trotter, William T., Jr. (*with* Erdős, Paul) When the Cartesian product of directed cycles is Hamiltonian. **80e:05063**
Vidyasankar, K. Covering the edge set of a directed graph with trees. **80c:05080**
Minimum strong cover in circuit-balanced graphs. **80a:05106**
Vincke, Philippe Une borne supérieure pour la faiblesse minimum d'un quasi-noyau dans un graphe. (English summary) **80m:05051**
Vranch, John Digons in digraphs. **80a:05107**
Wong, C. K. *See* **Hirschberg, D. S., 80k:05062**
Wormald, Nicholas C. *See* **Harary, Frank; et al., 80m:05050**
Yap, H. P. On a conjecture of Ervin Fried. **80g:05039**
Younger, D. H. *See* **Lucchesi, Cláudio L., 80e:05062**
Zelinka, Bohdan Strongly connected digraphs in which each edge is contained in exactly two cycles. (Russian summary) **80g:05040**

Secondary classifications:

Abdul-Kader, Issam Path decompositions of digraphs. **(80f:05056)**
Arczyński, Mirosław (*with* Borowiecki, Mieczysław; Sysło, Maciej M.) On Hallian digraphs, permanents and transversals. **(80k:15010)**
Arrowsmith, D. K. Percolation theory on multirooted directed graphs. **(80b:60131)**
Borowiecki, Mieczysław *See* **Arczyński, Mirosław; et al., (80k:15010)**
Chiappa, Raúl A. Sur la notion d'adjoint aux graphes orientés et aux graphes non orientés. (English summary) **(80m:05091)**
Collatz, Lothar Verzweigungsdiagramme und Hypergraphen. **(80d:58016)**
Deming, Robert W. Acyclic orientations of a graph and chromatic and independence numbers. **(80k:05056)**
Drucker, Daniel S. (*with* Goldschmidt, David M.) Graphical evaluation of sparse determinants. **(80g:15006)**
Gessel, Ira Tournaments and Vandermonde's determinant. **(80m:15003)**
Giles, Rick (*with* Hausmann, Dirk) Characterizations of adjacency on the branching polyhedron. **(80f:52004)**
Goldschmidt, David M. *See* **Drucker, Daniel S., (80g:15006)**
Hamidoune, Yahya Ould Sur les parcours hamiltoniens dans les graphes orientés. (English summary) **(80h:05034)**
Hausmann, Dirk *See* **Giles, Rick, (80f:52004)**
Hell, Pavol (*with* Nešetřil, Jaroslav) Homomorphisms of graphs and of their orientations. **(80a:05110)**
Higman, D. G. Systems of configurations. **(80m:20008)**
Janov, Ju. I. Several theorems on convolutions. (Russian. English summary) **(80g:03036)**
Johnson, Ellis L. (*with* Newman, Donald J.; Winston, Kenneth) An inequality on binomial coefficients. **(80d:05004)**
Karp, Richard M. A characterization of the minimum cycle mean in a digraph. **(80b:05039)**
Kononenko, A. M. (*with* Truhanovskiĭ, N. N.) The enumeration of maximal trees of a class of bipartite graphs. (Russian. English summary) **(80c:05063)**
Korlunov, A. D. Enumeration of finite automata. (Russian) **(80a:68050)**
Liu, Mu Lan *See* **Wan, Zhe Xian, (80i:05047)**
Maryland, Wallace, Jr. Decomposition of finite connected partially ordered sets. **(80m:06002)**
Maurer, Stephen B. (*with* Slater, Peter J.) On k-minimally n-edge-connected graphs. **(80c:05094)**
Nash-Williams, C. St. J. A. Should axiomatic set theory be translated into graph theory? **(80b:03074)**
Nešetřil, Jaroslav *See* **Hell, Pavol, (80a:05110)**
Newman, Donald J. *See* **Johnson, Ellis L.; et al., (80d:05004)**
Păun, Gheorghe On some variants of the traveling salesman problem. A mathematical linguistic approach. (Romanian. English summary) **(80j:90109)**
Plesník, Ján The NP-completeness of the Hamiltonian cycle problem in planar digraphs with degree bound two. **(80h:68043)**
Shoesmith, D. J. (*with* Smiley, T. J.) ★Multiple-conclusion logic. **(80k:03001)**
Slater, Peter J. *See* **Maurer, Stephen B., (80c:05094)**
Smiley, T. J. *See* **Shoesmith, D. J., (80k:03001)**
Speranza, Francesco Sur les colorations des graphes orientés. (Italian summary) **(80k:05059)**
Sridharan, M. R. Note on an asymptotic formula for a class of digraphs. **(80b:05037)**
Sysło, Maciej M. *See* **Arczyński, Mirosław; et al., (80k:15010)**
Thomassen, Carsten Hypohamiltonian graphs and digraphs. **(80e:05079)**
Trotter, William T., Jr. Order preserving embeddings of aographs. **(80a:05086)**
Truhanovskiĭ, N. N. *See* **Kononenko, A. M., (80c:05063)**
Wan, Zhe Xian (*with* Liu, Mu Lan) Automorphisms and homomorphisms of the de Bruijn-Good graph. (Chinese. English summary) **(80i:05047)**
Winston, Kenneth *See* **Johnson, Ellis L.; et al., (80d:05004)**

05C25 Graphs and groups [See also 20F32.]

Alspach, Brian (*with* Parsons, T. D.) Isomorphism of circulant graphs and digraphs. **80e:05064**
Astié-Vidal, Annie Groupes d'automorphismes des graphes d'intersection aux bases d'un matroïde. **80k:05063**
Babai, László (*with* Nešetřil, Jaroslav) High chromatic rigid graphs. I. **80i:05044**
(*with* Frankl, Péter; Kollár, János; Sabidussi, Gert) Hamiltonian cubic graphs and centralizers of involutions. **80f:05047**
Basu, Manjusri Eccentricity preserving automorphism of a graph. **80b:05029**
Bumiller, Carl On rank three graphs with a large eigenvalue. **80e:05065**
Djoković, Dragomir Ž. On regular graphs. V, VI. **80k:05064**
Doyle, John Kevin Weak starred polygons and Cayley graphs. **80a:05108**
Edelman, Paul H. (*with* Saks, Michael) Group labelings of graphs. **80j:05071**
Ferri, Massimo A non-Cayleyian diagram for presentations of groups. **80i:05045**
Frankl, Péter *See* **Babai, László; et al., 80f:05047**
Gardiner, A. Homogeneity conditions in graphs. **80b:05034**
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Ostroverhaja, L. D. (*with* Ostroverhĭ, M. O.) A criterion for isomorphism and groups of automorphisms of graphs. (Russian) **80f:05049**
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Schupp, Paul E. Groups and graphs. **80i:05046**
Ševčenko, E. N. A group of the KVP-graph. (Russian) **80f:05050**
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Wan, Zhe Xian (*with* Liu, Mu Lan) Automorphisms and homomorphisms of the de Bruijn-Good graph. (Chinese. English summary) **80i:05047**
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Elations of graphs. **80k:05067**
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Pica, G. Enumeration of maximal outer-planar graphs with four vertices of degree two and the examination of the group of their automorphisms. (Italian. English summary) **(80f:05052)**
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05C30 Enumeration of graphs and maps

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Chottin, Laurent Application des séries non commutatives aux problèmes de codage et d'énumération. **80d:05028**
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Entringer, R. C. Characterization of maximum critically 2-connected graphs. **80a:05116**
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The generation of three-connected graphs and the enumeration of inseparable networks. (Russian) **80e:05068**
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Robinson, Robert W. *See* **Harary, Frank, 80b:05036**
Ruscitti, Aldo Some results of Grünbaum and Motzkin: dual versions and new developments. (Italian. English summary) **80g:05042**
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05C35 Extremal problems

Abbott, Harvey (*with* Katchalski, Meir) A Turán type problem for interval graphs. **80b:05038**
(*with* Liu, A. C.) Bounds for the covering number of a graph. **80i:05053**
Allan, Robert B. (*with* Laskar, Renu) On domination and independent domination numbers of a graph. **80c:05086**
Avis, David On minimal 5-chromatic triangle-free graphs. **80k:05069**
Babai, László Long cycles in vertex-transitive graphs. **80m:05059**
Bollobás, Béla ★Extremal graph theory. **80a:05120**
(*with* Erdős, Paul; Simonovits, Miklós; Szemerédi, Endre) Extremal graphs without large forbidden subgraphs. **80a:05119**
(*with* Eldridge, S. E.) Packings of graphs and applications to computational complexity. **80d:05030**
The number of 1-factors in $2k$-connected graphs. **80m:05060**
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(*with* Häggkvist, Roland) On diameter critical graphs. **80k:05070**
Cockayne, E. J. (*with* Hedetniemi, Stephen) Towards a theory of domination in graphs. **80i:05054**
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Deming, Robert W. Independence numbers of graphs—an extension of the Koenig-Egervary theorem. **80j:05074**
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Katona, G. O. H. Continuous versions of some extremal hypergraph problems. **80e:05071**
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Le Cong Thanh (*with* Phan Diñh Diêu) Asymptotic estimates for some parameters of finite graphs, and their applications. (Russian) **80k:05071**
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Loréa, Michel On Turán hypergraphs. **80f:05053**
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A generalization of the Hoffman-Singleton graph. **80m:05067**
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Nirmala, K. Complementary graphs and total chromatic numbers. **80m:05068**
O'Keefe, M. (*with* Wong, Pak Ken) A smallest graph of girth 5 and valency 6. **80i:05056**
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Sridharan, M. R. On an extremal problem concerning pancyclic graphs. **80e:05072**
Steele, J. Michael Existence of submatrices with all possible columns. **80f:05055**
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A note on a conjecture of Gallai concerning α-critical graphs. **80c:05088**
Szemerédi, Endre *See* **Bollobás, Béla; et al., 80a:05119**
Tomová, Eliška Decomposition of complete bipartite graphs into factors with given radii. (Russian summary) **80i:05058**
Wallis, W. D. *See* **Heinrich, Katherine, 80m:05066**
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Ibaraki, Toshihide *See* **Hammer, Peter L.; et al., (80j:05088)**
Kalašnikov, V. A. *See* **Kulešov, Ju. M.; et al., (80f:94042)**
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On a theorem of K. Zarankiewicz. (Romanian. French summary) **(80i:05064)**

Vidyasankar, K. Covering the edge set of a directed graph with trees. **(80e:05080)**

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05C38 Paths and cycles

Abdul-Kader, Issam Path decompositions of digraphs. **80f:05056**

Bollobás, Béla Semi-topological subgraphs. **80a:05125**

Nested cycles in graphs. (French summary) **80i:05059**

Bosák, Juraj Geodetic graphs. **80d:05031**

Graphs with unique walks, trails or paths of given lengths. **80a:05126**

Buekenhout, Francis Separation and dimension in a graph. **80j:05078**

Cenzer, Douglas (*with* Howorka, Edward) On vertex k-partitions of certain infinite graphs. **80f:05057**

Dirac, G. A. Interminable paths and trails: extreme cases. **80a:05127**

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Gyárfás, A. (*with* Lehel, J.) Packing trees of different order into K_n. **80c:05089**

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Howorka, Edward *See* **Cenzer, Douglas, 80f:05057**

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Jungerman, Mark l-regular rotations of the countably infinite complete graph. **80h:05033**

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Lahrichi, Abdelkader Coûts moyens de circuits hamiltoniens de K_n. (English summary) **80i:05060**

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Lewin, Mordechai On path connected graphs. **80m:05073**

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Über die Maximalzahl kreuzungsfreier H-Wege. **80f:05058**

Zur Struktur minimal n-fach zusammenhängender Graphen. **80j:05080**

Nešetřil, Jaroslav Infinite precise objects. (Russian summary) **80i:05061**

Nieminen, Juhani Applications of lattice theory and ideals to graph theory. **80c:05090**

Rao, Siddani Bhaskara The number of open chains of length three and the parity of the number of open chains of length k in self-complementary graphs. **80j:05081**

Rubin, Izhak *See* **Hartman, Jehuda, 80g:05044**

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Thomassen, Carsten On separating cycles in graphs. **80d:05035**

Counterexamples to Faudree and Schelp's conjecture on Hamiltonian-connected graphs. **80a:05131**

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Demidenko, V. M. On the optimization of the value $v(A, \tau)$ on the set of cycles. (Russian. English summary) **(80g:90070)**

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Sridharan, M. R. On an extremal problem concerning pancyclic graphs. **(80e:05072)**

Thomassen, Carsten Hypohamiltonian graphs and digraphs. **(80e:05079)**

Vijayan, K. S. On arc-transitive graphs. **(80e:05067)**

Wormald, Nicholas C. A 4-chromatic graph with a special plane drawing. **(80k:05060)**

Zelinka, Bohdan On a problem of R. Häggkvist concerning edge-colourings of graphs. (Russian summary) **(80a:05099)**

05C40 Connectivity

Aaglun, Dana A note on a construction of Margulis. **80j:05082**

Bauer, Douglas (*with* Tindell, Ralph) Graphs with prescribed connectivity and line graph connectivity. **80j:05083**

Chaty, G. (*with* Chein, M.) Minimally 2-edge connected graphs. **80b:05040**

Chein, M. *See* **Chaty, G., 80b:05040**

Egorov, A. G. *See* **Gaĭfullin, È. Š., 80a:05132**

Entringer, R. C. (*with* Slater, Peter J.) A theorem on critically 3-connected graphs. **80i:05065**

Gabow, Harold N. Algorithmic proofs of two relations between connectivity and the 1-factors of a graph. **80i:05066**

Gaĭfullin, È. Š. (*with* Egorov, A. G.) Cutting graphs into minimally connected subgraphs with the introduction of redundant vertices. (Russian) **80a:05132**

Georgieva, N. C. An algorithm for the exact partitioning of a graph with N vertices into two subgraphs. (Bulgarian. Russian and English summaries) **80a:05133**

Goldsmith, Donald L. (*with* White, Arthur T.) On graphs with equal edge-connectivity and minimum degree. **80a:05134**

Győri, Ervin On division of graphs to connected subgraphs. **80e:05074**

Hafner, Paul (*with* Harary, Frank) Cutpoints in the conjunction of two graphs. **80c:05093**

Hakimi, S. L. (*with* Schmeichel, E. F.) On the connectivity of maximal planar graphs. **80a:05135**

Harary, Frank *See* **Hafner, Paul, 80c:05093**

Kulkarni, K. H. Minimally locally 1-connected graphs. **80b:05041**

Lipman, Marc J. (*with* Ringeisen, Richard D.) Switching connectivity in graphs. **80h:05073**

Mader, W. A reduction method for edge-connectivity in graphs. **80d:05036**

Maurer, Stephen B. (*with* Slater, Peter J.) On k-minimally n-edge-connected graphs. **80c:05094**

Nebeský, Ladislav The minimum degree and connectivity of a graph. **80a:05136**

On pancyclic line graphs. **80a:05137**

Ringeisen, Richard D. *See* **Lipman, Marc J., 80h:05073**

Schmeichel, E. F. *See* **Hakimi, S. L., 80a:05135**

Slater, Peter J. *See* **Maurer, Stephen B., 80c:05094** *and* **Entringer, R. C., 80i:05065**

Šuvikov, V. I. The minimal number of edges in a doubly connected graph with given diameter. (Russian) **80c:05095**

Tindell, Ralph *See* **Bauer, Douglas, 80j:05083**

White, Arthur T. *See* **Goldsmith, Donald L., 80a:05134**

Secondary classifications:

Babics, László (*with* Dénes, Tamás) Graph theoretical tools for the study of the cumulative build-up of empirical sociology. (Hungarian. English and Russian summaries) **(80m:92012)**

Cenzer, Douglas (*with* Howorka, Edward) On vertex k-partitions of certain infinite graphs. **(80f:05057)**

Das, Sunil R. (*with* Sheng, C. L.) Strong connectivity in symmetric graphs and generation of maximal minimally strongly connected subgraphs. **(80e:68165)**

Dénes, Tamás *See* **Babics, László, (80m:92012)**
Dirac, G. A. Interminable paths and trails: extreme cases. **(80a:05127)**
Foster, Brian L. *See* **Seidman, Stephen B., (80j:92014)**
Gessel, Ira (*with* Wang, Da Lun) Depth-first search as a combinatorial correspondence. **(80k:05042)**
Harary, Frank (*with* Kabell, Jerald A.) Extremal graphs with given connectivities. **(80m:05065)**
Howorka, Edward *See* **Cenzer, Douglas, (80f:05057)**
Imrich, Wilfried On the connectivity of Cayley graphs. **(80j:05072)**
Ivančík, I. I. Problems of the theory of graphs in statistical physics. (Russian) **(80k:82014)**
Jungerman, Mark A characterization of upper-embeddable graphs. **(80a:05080)**
Kabell, Jerald A. *See* **Harary, Frank, (80m:05065)**
Nguyen Huy Xuong *See* **Payan, Charles, (80f:05038)**
Payan, Charles (*with* Nguyen Huy Xuong) Upper embeddability and connectivity of graphs. **(80f:05038)**
Salehi, S. V. On finding the transmittance between any two points in a composite system. **(80j:93013)**
Schnorr, C.-P. Multiterminal network flow and connectivity in unsymmetrical networks. **(80d:90036)**
Seidman, Stephen B. (*with* Foster, Brian L.) A graph-theoretic generalization of the clique concept. **(80j:92014)**
Sheng, C. L. *See* **Das, Sunil R., (80e:68165)**
Toft, Bjarne An investigation of colour-critical graphs with complements of low connectivity. **(80a:05098)**
Wang, Da Lun *See* **Gessel, Ira, (80k:05042)**
Wormald, Nicholas C. Enumeration of labelled graphs. I. 3-connected graphs. **(80i:05052a)**
Enumeration of labelled graphs. II. Cubic graphs with a given connectivity. **(80i:05052b)**

05C45 Eulerian and Hamiltonian graphs

Bhat-Nayak, Vasanti N. *See* **Rao, Siddani Bhaskara; et al., 80m:05077**
Binz, J. C. Hamiltonwege in rechteckigen und quaderförmigen Gittergraphen. **80g:05046**
Bixby, Robert E. (*with* Wang, Da Lun) An algorithm for finding Hamiltonian circuits in certain graphs. **80e:05075**
Bondy, John Adrian Hamilton cycles in graphs and digraphs. **80k:05074**
A remark on two sufficient conditions for Hamilton cycles. **80j:05084**
Foregger, Marsha F. Hamiltonian decompositions of products of cycles. **80a:05138**
Goodey, P. R. (*with* Rosenfeld, Moshe) Hamiltonian circuits in prisms over certain simple 3-polytopes. **80e:05076**
Hakimi, S. L. (*with* Schmeichel, E. F.; Thomassen, Carsten) On the number of Hamiltonian cycles in a maximal planar graph. **80k:05075**
Hamidoune, Yahya Ould Sur les parcours hamiltoniens dans les graphes orientés. (English summary) **80h:05034**
Heinrich, Peter (*with* Schaar, Günter) Über zusammenhängende Graphen mit p-hamiltonscher $(p+1)$-ter Potenz $(p \geq 4)$. **80k:05076**
Hobbs, Arthur M. Maximal Hamiltonian cycles in squares of graphs. **80k:05077a**
Hamiltonian squares of cacti. **80k:05077b**
Hoede, C. On characterization of Hamiltonian graphs. **80h:05035**
Jackson, Bill Edge-disjoint Hamilton cycles in regular graphs of large degree. **80k:05078**
Javdekar, Medha M. Minimally $(p-7)$-Hamiltonian graphs. **80m:05075**
Klerlein, Joseph B. (*with* Starling, A. Gregory) Hamiltonian cycles in Cayley color graphs of semidirect products. **80j:05085**
Kotzig, Anton (*with* Labelle, Jacques) Strongly Hamiltonian graphs. **80a:05139**
(*with* Labelle, Jacques) Quelques problèmes ouverts concernant les graphes fortement hamiltoniens. **80g:05047**
Labelle, Jacques *See* **Kotzig, Anton, 80a:05139** *and* **Kotzig, Anton, 80g:05047**
Little, Charles H. C. On graphs as unions of Eulerian graphs. **80m:05076**
Naik, Ranjan N. *See* **Rao, Siddani Bhaskara; et al., 80m:05077**
Nebeský, Ladislav On Eulerian subgraphs of complementary graphs. **80g:05048**
Oberly, David J. (*with* Sumner, David P.) Every connected, locally connected nontrivial graph with no induced claw is Hamiltonian. **80j:05086**
Price, W. L. An algorithm which generates the Hamiltonian circuits of a cubic planar map. **80f:05060**
Rao, Siddani Bhaskara (*with* Bhat-Nayak, Vasanti N.; Naik, Ranjan N.) Characterization of frequency partitions of Eulerian graphs. **80m:05077**
Rosenfeld, Moshe *See* **Goodey, P. R., 80e:05076**
Ryang, So Yon (*with* Ryu, Hae Dong) A new method of determining Hamiltonian cycles and spanning partial graphs. (Korean. English summary) **80m:05078**
Ryu, Hae Dong A formula for completely determining an Eulerian spanning path of a graph. (Korean. English summary) **80a:05140**
A formula determining all of the Hamiltonian cycles of a graph. (Korean. English summary) **80j:05087**
See also **Ryang, So Yon, 80m:05078**
Schaar, Günter On 3-Hamiltonian cubes of connected graphs. **80c:05096**
See also **Heinrich, Peter, 80k:05076**
Schmeichel, E. F. *See* **Hakimi, S. L.; et al., 80k:05075**
Starling, A. Gregory *See* **Klerlein, Joseph B., 80j:05085**
Sumner, David P. *See* **Oberly, David J., 80j:05086**
Thomason, Andrew Hamiltonian cycles and uniquely edge colourable graphs. **80e:05077**
Thomassen, Carsten Hypohamiltonian graphs and digraphs. **80e:05079**
Hamiltonian paths in squares of infinite locally finite blocks. **80e:05078**
See also **Hakimi, S. L.; et al., 80k:05075**
Underground, P. On graphs with Hamiltonian squares. **80c:05097**
Wang, Da Lun *See* **Bixby, Robert E., 80e:05075**
West, Douglas B. Pairs of adjacent Hamiltonian circuits with small intersection. **80a:05141**
Woodall, D. R. A sufficient condition for Hamiltonian circuits. **80c:05089**
Young, H. P. On permutations and permutation polytopes. **80a:05142**
Zaks, Joseph Non-Hamiltonian simple 3-polytopes having just two types of faces. **80m:05079**

Secondary classifications:

Berkowitz, H. W. Restricted Eulerian circuits in directed graphs. **(80c:05074)**
Berman, Kenneth A. An-Eulerian digraphs and the determination of those Eulerian digraphs having an odd number of directed Eulerian paths. **(80c:05075)**
Bermond, Jean-Claude (*with* Germa, A.; Heydemann, M. C.; Sotteau, D.) Hypergraphes hamiltoniens. (English summary) **(80j:05093)**
Boel, R. J. *See* **Kasteleyn, P. W., (80g:82010)**
Butler, Kim Ki-Hang (*with* Roush, Fred) Words with prescribed adjacencies. **(80f:05008)**
Erdős, Paul *See* **Trotter, William T., Jr., (80c:05063)**
Faudree, R. J. (*with* Schelp, R. H.) Various length paths in graphs. **(80m:05071)**
Germa, A. *See* **Bermond, Jean-Claude; et al., (80j:05093)**
Hatzel, Wolfgang Ein planarer hypohamiltonscher Graph mit 57 Knoten. **(80m:05072)**
Heydemann, M. C. *See* **Bermond, Jean-Claude; et al., (80j:05093)**
Jaeger, F. A note on sub-Eulerian graphs. **(80k:05036)**
Kasteleyn, P. W. (*with* Boel, R. J.) Extremal Λ-inequalities for Ising models with pair interactions. **(80g:82010)**
Kreweras, Germain Complexité et circuits eulériens dans les sommes tensorielles de graphes. (English summary) **(80c:05099)**
Labrichi, Abdelkader Coûts moyens de circuits hamiltoniens de K_n. (English summary) **(80i:05060)**
Lewin, Mordechai On path connected graphs. **(80m:05073)**
Maghout, Khaled Un problème de rangement. (English summary) **(80j:05037)**
Pulleyblank, W. R. A note on graphs spanned by Eulerian graphs. **(80m:68041)**
Roush, Fred *See* **Butler, Kim Ki-Hang, (80f:05008)**
Schelp, R. H. *See* **Faudree, R. J., (80m:05071)**
Semko, A. V. A graph component of the φ-transformation. (Russian) **(80f:05041)**
Sotteau, D. *See* **Bermond, Jean-Claude; et al., (80j:05093)**
Trotter, William T., Jr. (*with* Erdős, Paul) When the Cartesian product of directed cycles is Hamiltonian. **(80c:05063)**
Zaĭcev, M. A. A Hamiltonian isomorphism of graphs. (Russian) **(80c:05083)**

05C50 Graphs and matrices

Abramjan, K. B. An invariant of a simple graph. (Russian) **80i:05067**
Bussemaker, F. C. (*with* Cvetković, Dragoš M.; Seidel, J. J.) Graphs related to exceptional root systems. **80g:05049**
Collatz, Lothar Spektren periodischer Graphen. **80b:05042**
Cvetković, Dragoš M. Some topics from the theory of graph spectra. **80m:05082**
See also **Bussemaker, F. C.; et al., 80g:05049**
D'Amato, Susan S. Eigenvalues of graphs with twofold symmetry. **80c:05098**
Faradžev, I. A. *See* **Zaĭcenko, V. A.; et al., 80e:05082**
Farrell, E. J. On a class of polynomials obtained from the circuits in a graph and its application to characteristic polynomials of graphs. **80e:05081**
Feng, Ke Qin *See* **Li, Qiao, 80k:05079**
Fiedler, Miroslav Aggregation in graphs. **80g:05050**
Golumbic, Martin Charles (*with* Goss, Clinton F.) Perfect elimination and chordal bipartite graphs. **80d:05037**
Goss, Clinton F. *See* **Golumbic, Martin Charles, 80d:05037**
Hammer, Peter L. (*with* Ibaraki, Toshihide; Simeone, B.) Degree sequences of threshold graphs. **80j:05088**
Handa, Hideo (*with* Takenaka, Yoshiko) On the spectrum of a graph. **80a:05143**
Heydemann, M. C. Caractérisation spectrale du joint d'un cycle par un stable. (English summary) **80m:05080**
Homenko, M. P. (*with* Vivrot, T. M.) Properties of the matrix of independent cycles of a graph. (Russian) **80f:05061**
An inductive method of constructing determining matrices. I. (Russian) **80h:05036a**
(*with* Ševčenko, E. N.) An inductive method of constructing determining matrices. II. (Russian) **80h:05036b**
Ibaraki, Toshihide *See* **Hammer, Peter L.; et al., 80j:05088**
Ivanov, A. V. *See* **Zaĭcenko, V. A.; et al., 80e:05082**
Kreweras, Germain Complexité et circuits eulériens dans les sommes tensorielles de graphes. (English summary) **80c:05099**
Li, Qiao (*with* Feng, Ke Qin) On the largest eigenvalue of a graph. (Chinese) **80k:05079**
Rozenfel'd, M. Z. *See* **Zaĭcenko, V. A.; et al., 80e:05082**
Seidel, J. J. *See* **Bussemaker, F. C.; et al., 80g:05049**
Ševčenko, E. N. On the question of constructing determining matrices. (Russian) **80h:05036c**
See also **Homenko, M. P., 80h:05036b**
Simeone, B. *See* **Hammer, Peter L.; et al., 80j:05088**
Takenaka, Yoshiko *See* **Handa, Hideo, 80a:05143**
Tyškevič, R. I. Characterization of (0, 1)-matrices that are defined by the number of units in rows and columns and of unigraphic sequences. (Russian. English summary) **80b:05043**
Vivrot, T. M. *See* **Homenko, M. P., 80f:05061**
Zaĭcenko, V. A. (*with* Ivanov, A. V.; Rozenfel'd, M. Z.; Faradžev, I. A.) An algorithm for checking the canonicity of a partially augmented adjacency matrix of a graph. (Russian) **80e:05082**

Secondary classifications:

Godsil, C. D. Graphs, groups and polytopes. **(80m:05053)**
(*with* Gutman, Ivan) Topological resonance energy is real. **(80j:81092)**
Graham, R. L. (*with* Lovász, László) Distance matrix polynomials of trees. **(80e:05049)**

Gutman, Ivan *See* **Godsil, C. D., (80j:81092)**
Haemers, Willem A generalization of the Higman-Sims technique. **(80c:05044)**
On some problems of Lovász concerning the Shannon capacity of a graph. **(80g:94040)**
Homenko, M. P. φ-transformations, topology and algebra of graphs. (Russian) **(80f:05026)**
(*with* Strok, V. V.) *T*-factorization of $\mathfrak{B}$-graphs. (Russian) **(80f:05065)**
Indik, R. (*with* Pless, Vera) Code graphs. **(80a:94029)**
Irving, Robert W. A bipartite Ramsey problem and the Zarankiewicz numbers. **(80a:05150)**
Johnson, Charles R. (*with* Kellogg, R. B.; Stephens, A. B.) Complex eigenvalues of a nonnegative matrix with a specified graph. II. **(80g:15020a)**
Kellogg, R. B. *See* **Johnson, Charles R.; et al., (80g:15020a)**
Lovász, László *See* **Graham, R. L., (80e:05049)**
Pless, Vera *See* **Indik, R., (80a:94029)**
Pouzet, Maurice Quelques remarques sur les résultats de Tutte concernant le problème de Ulam. **(80e:05084)**
Randić, Milan Characterization of atoms, molecules and classes of molecules based on paths enumerations. **(80m:81116)**
Saunders, B. David (*with* Schneider, Hans) Cones, graphs and optimal scalings of matrices. **(80k:15036)**
Schneider, Hans *See* **Saunders, B. David, (80k:15036)**
Seidel, J. J. Eutactic stars. **(80d:05016)**
The pentagon. **(80f:51008)**
Stephens, A. B. *See* **Johnson, Charles R.; et al., (80g:15020a)**
Strok, V. V. *See* **Homenko, M. P., (80f:05065)**
Young, H. P. On permutations and permutation polytopes. **(80a:05142)**

05C55 Generalized Ramsey theory

Benedict, James M. (*with* Chartrand, Gary; Lick, Don R.) Mixed Ramsey numbers: chromatic numbers versus graphs. **80a:05144**
Benhocine, A. Nombres de Ramsey dans le cas orienté. (English summary) **80a:05145**
Brudno, A. A. (*with* Faradžev, I. A.) A study of Ramsey graphs using computers. (Russian) **80e:05083**
Burr, S. A. (*with* Erdős, Paul; Faudree, R. J.; Schelp, R. H.) A class of Ramsey-finite graphs. **80m:05081**
Chartrand, Gary *See* **Benedict, James M.; et al., 80a:05144**
Chung, K. M. (*with* Liu, C. L.) A generalization of Ramsey theory for graphs. **80c:05100**
Erdős, Paul (*with* Faudree, R. J.; Rousseau, C. C.; Schelp, R. H.) The size Ramsey number. **80h:05037**
See also **Burr, S. A.; et al., 80m:05081**
Fajtlowicz, S. On the size of independent sets in graphs. **80j:05089**
Faradžev, I. A. *See* **Brudno, A. A., 80e:05083**
Faudree, R. J. (*with* Schelp, R. H.) Connected Ramsey numbers for paths and stars. **80c:05101**
(*with* Rousseau, C. C.; Sheehan, J.) More from the good book. **80h:05038**
(*with* Schelp, R. H.) Some problems in Ramsey theory. **80a:05146**
(*with* Schelp, R. H.) Some connected Ramsey numbers. **80a:05147**
See also **Erdős, Paul; et al., 80h:05037** *and* **Burr, S. A.; et al., 80m:05081**
Graham, R. L. (*with* Rothschild, B. L.) Ramsey theory. **80h:05039**
(*with* Spencer, Joel H.) A general Ramsey product theorem. **80f:05062**
Hanson, Denis (*with* Hanson, J.) Sum-free sets and Ramsey numbers. II. **80a:05148**
Hanson, J. *See* **Hanson, Denis, 80a:05148**
Harary, Frank (*with* Schwenk, A. J.) Generalized Ramsey theory for graphs. VII. Ramsey numbers for multigraphs and networks. **80a:05149**
(*with* Robinson, Robert W.) Generalized Ramsey theory. IX. Isomorphic factorizations. IV. Isomorphic Ramsey numbers. **80i:05068**
Irving, Robert W. A bipartite Ramsey problem and the Zarankiewicz numbers. **80a:05150**
Lesniak-Foster, Linda M. (*with* Polimeni, Albert D.; Vanderjagt, Donald W.) Mixed Ramsey numbers: edge chromatic numbers vs. graphs. **80b:05044**
Lick, Don R. *See* **Benedict, James M.; et al., 80a:05144**
Liu, C. L. *See* **Chung, K. M., 80c:05100**
Milliken, Keith R. A Ramsey theorem for trees. **80j:05090**
Nešetřil, Jaroslav (*with* Rödl, Vojtěch) The structure of critical Ramsey graphs. **80c:05102**
(*with* Rödl, Vojtěch) A simple proof of the Galvin-Ramsey property of the class of all finite graphs and a dimension of a graph. **80j:05091**
Polimeni, Albert D. *See* **Lesniak-Foster, Linda M.; et al., 80b:05044**
Robinson, Robert W. *See* **Harary, Frank, 80i:05068**
Rödl, Vojtěch *See* **Nešetřil, Jaroslav, 80c:05102** *and* **Nešetřil, Jaroslav, 80j:05091**
Rothschild, B. L. *See* **Graham, R. L., 80h:05039**
Rousseau, C. C. (*with* Sheehan, J.) Ramsey numbers for books. (French summary) **80j:05092**
(*with* Sheehan, J.) On Ramsey numbers for books. **80a:05151**
See also **Erdős, Paul; et al., 80h:05037** *and* **Faudree, R. J.; et al., 80h:05038**
Schelp, R. H. *See* **Faudree, R. J., 80a:05146; Faudree, R. J., 80a:05147; Faudree, R. J., 80c:05101; Erdős, Paul; et al., 80h:05037** *and* **Burr, S. A.; et al., 80m:05081**
Schwenk, A. J. *See* **Harary, Frank, 80a:05149**
Sheehan, J. *See* **Rousseau, C. C., 80a:05151; Faudree, R. J.; et al., 80h:05038** *and* **Rousseau, C. C., 80j:05092**
Spencer, Joel H. *See* **Graham, R. L., 80f:05062**
Sumner, David P. The connected Ramsey number. **80a:05152**
Vanderjagt, Donald W. *See* **Lesniak-Foster, Linda M.; et al., 80b:05044**

Secondary classifications:

Bollobás, Béla (*with* Duchet, Pierre) Helly families of maximal size. **(80j:05004)**
Duchet, Pierre *See* **Bollobás, Béla, (80j:05004)**
Enting, I. G. The combinatorics of algebraic graph theory in theoretical physics. **(80d:82001)**
Erdős, Paul Set-theoretic, measure-theoretic, combinatorial, and number-theoretic problems concerning point sets in Euclidean space. **(80g:04005)**
Nešetřil, Jaroslav (*with* Rödl, Vojtěch) Partition (Ramsey) theory—a survey. **(80c:05003)**
Rödl, Vojtěch *See* **Nešetřil, Jaroslav, (80c:05003)**
Spencer, Joel H. Ramsey's theorem for spaces. **(80d:05008)**

05C60 Reconstruction conjecture

Bondy, John Adrian (*with* Hemminger, R. L.) Reconstruction by enumeration—some applications of a counting theorem to the graph reconstruction problem. (French summary) **80i:05069**
Devadas, M. V. *See* **Sampathkumar, E., 80m:05085**
Hemminger, R. L. *See* **Bondy, John Adrian, 80i:05069**
Holton, D. A. Reconstruction. **80a:05153**
Lauri, Josef Edge-reconstruction of planar graphs with minimum valency 5. **80m:05083**
Mulla, F. S. A class of graphs for which the Ulam conjecture holds. **80c:05103**
Pouzet, Maurice Quelques remarques sur les résultats de Tutte concernant le problème de Ulam. **80e:05084**
Ramachandran, S. On the reconstruction conjecture. **80m:05084**
A test for legitimate decks. **80d:05038**
Sampathkumar, E. (*with* Devadas, M. V.) On reconstruction of a graph from its *v*-partition graphs. **80m:05085**
Thomassen, Carsten Reconstructing 1-coherent locally finite trees. **80h:05040**
Reconstructibility versus edge reconstructibility of infinite graphs. **80g:05051**

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Maloney, John P. A non graph theory approach to Ulam's conjecture. **(80g:05017)**
Pouzet, Maurice Relations non reconstructibles par leurs restrictions. **(80d:08006)**
Schmieder, R. Bemerkungen zu einem Isomorphie-Problem für Graphen, die speziellen Matrizen zugeordnet sind. **(80k:05087)**

05C65 Hypergraphs

Abbott, Harvey (*with* Liu, A. C.) The existence problem for colour critical linear hypergraphs. **80i:05070**
Andreae, Thomas On a problem of R. Halin concerning infinite graphs. **80e:05089**
Baranyai, Zsolt Some applications on equalized matrices. **80d:05039**
Beck, Jon M. On 3-chromatic hypergraphs. **80e:05085**
Benzaken, C. Post's closed systems and the weak chromatic number of hypergraphs. **80a:05154**
Berge, Claude Multicolorings. **80c:05104**
Regularisable graphs. **80a:05155**
Regularisable graphs. I, II. **80h:05041**
Multicoloring of a graph. **80h:05042**
Bermond, Jean-Claude (*with* Germa, A.; Heydemann, M. C.; Sotteau, D.) Hypergraphes hamiltoniens. (English summary) **80j:05093**
(*with* Germa, A.; Heydemann, M. C.) Graphes représentatifs d'hypergraphes. (English summary) **80m:05086**
Cockayne, E. J. (*with* Hedetniemi, Stephen; Miller, D. J.) Properties of hereditary hypergraphs and middle graphs. **80m:05087**
Flament, Claude Hypergraphes arborés. **80d:05040**
Frankl, Péter An extremal problem for 3-graphs. **80f:05063**
Gaĭkov, N. E. Maximization of the scalar product of multidimensional matrices and the problem of sectioning a weighted hypergraph. (Russian. English summary) **80a:05156**
Germa, A. Decomposition of the edges of a complete *t*-uniform directed hypergraph. **80e:05086**
See also **Bermond, Jean-Claude; et al., 80j:05093** *and* **Bermond, Jean-Claude; et al., 80m:05086**
Gionfriddo, Mario Hypergraphs lacking significant *r*-cycles and *K*-hypertrees. (Italian) **80h:05043**
Golumbic, Martin Charles The inducibility of hypergraphs. **80k:05080**
Gyárfás, A. A note on hypergraphs with the Helly-property. **80b:05045**
Hedetniemi, Stephen *See* **Cockayne, E. J.; et al., 80m:05087**
Heydemann, M. C. (*with* Sotteau, D.) Line-graphs of hypergraphs. II. **80g:05052**
See also **Bermond, Jean-Claude; et al., 80j:05093** *and* **Bermond, Jean-Claude; et al., 80m:05086**
Liu, A. C. *See* **Abbott, Harvey, 80i:05070**
Lovász, László On minimax theorems of combinatorics. (Hungarian) **80a:05157**
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Codes *See* **Colloque: Mathématiques Discrètes: Codes et Hypergraphes, (80f:05002)**
Colloque:
Mathématiques Discrètes: Codes et Hypergraphes ★Colloque Mathématiques Discrètes: Codes et Hypergraphes. **(80f:05002)**
Discrete mathematics *See* **Colloque: Mathématiques Discrètes: Codes et Hypergraphes, (80f:05002)**
Hypergraphs *See* **Colloque: Mathématiques Discrètes: Codes et Hypergraphes, (80f:05002)**

05C70 Factorization, matching, covering and packing

05C75 Structural characterization of types of graphs

05C99 None of the above, but in this section

Acharya, B. Devadas (*with* Vartak, M. N.) On the graphs having unique maximal connecting partition graphs. **80i:05071**
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Baraev, A. M. (*with* Faradžev, I. A.) The construction and computer investigation of homogeneous and homogeneous bipartite graphs. (Russian) **80b:05046**
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Homenko, M. P. Properties of graphs of 0- and 1-graph classifications. (Russian) **80f:05064**
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Kotzig, Anton (*with* Turgeon, Jean M.) β-valuations of regular graphs with complete components. **80g:05056**
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König, Dénes *See* **Gallai, Tibor, (80b:01021)**
Biography:
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06–XX ORDER, LATTICES, ORDERED ALGEBRAIC STRUCTURES [See also 18B35.]

06–01 Elementary exposition, textbooks

(Elsenreich, Günther) *See* **Vladimirov, D. A., 80b:06001**
Vladimirov, D. A. ★Boolesche Algebren. **80b:06001**

Secondary classifications:

Aigner, Martin ★Combinatorial theory. **(80h:05002)**

06–02 Advanced exposition (research surveys, monographs, etc.)

Grätzer, George ★General lattice theory. **80c:06001a**
★General lattice theory. **80c:06001b**

Secondary classifications:

Fáy, Gyula (*with* Tőrös, Róbert) ★Kvantumlogika. (Hungarian) [Quantum logic] **(80b:81009)**
Tőrös, Róbert *See* **Fáy, Gyula, (80b:81009)**

06–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Mehrtens, Herbert ★Die Entstehung der Verbandstheorie. **(80m:01028)**

06–04 Explicit machine computation and programs (not the theory of computation or programming)

06–06 Proceedings, conferences, etc.

06Axx Ordered sets

(Salii, V. N.) *See* **Ordered sets and lattices, 80f:06001**
Lattices *See* **Ordered sets and lattices, 80f:06001**
Ordered sets and lattices ★Упорядоченные множества и решетки. Вып. 5. (Russian) [Ordered sets and lattices. No. 5] **80f:06001**
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06A05 Total order

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06A10 Partial order

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Kopeček, Oldřich Representation of ordered classes by classes of connected unary algebras. **80a:06002**

Kornilova, L. E. (*with* Voĭtišin, Ju. V.) Some properties of antichains of partially ordered sets. (Russian. English summary) **80c:06004**

Laver, Richard Better-quasi-orderings and a class of trees. **80c:06005**

Maryland, Wallace, Jr. Decomposition of finite connected partially ordered sets. **80m:06002**

Nelson, James, Jr. Fixed points of order preserving surjections on partially ordered sets. **80d:06002**

Pickert, Günter Stärker als jeder Schnellere und schneller als jeder Stärkere; ein Beispiel zum Arbeiten mit zwei Ordnungsrelationen. **80a:06003**

Pretzel, Oliver *Another proof of Dilworth's decomposition theorem.* **80d:06003**

Rabinovitch, I. Characteristics of minimal realizers. (French summary) **80g:06001**

Rival, Ivan (*with* Wille, Rudolf) Lattices freely generated by partially ordered sets: which can be "drawn"? **80j:06005**
See also **Duffus, Dwight, 80b:06002; Duffus, Dwight, 80j:06003** *and* **Duffus, Dwight, 80k:06001**

Roush, Fred W. *See* **Kim, Ki Hang, 80i:06004**

Simovici, Dan A. Posets and free semigroups. **80c:06006**

Tanaev, V. S. Optimal decomposition of a partially ordered set into chains. (Russian. English summary) **80m:06003**

Trotter, William T., Jr. Combinatorial problems in dimension theory for partially ordered sets. (French summary) **80g:06002**

Vincke, Philippe Quasi-ordres généralisés et représentation numérique. (English summary) **80h:06002**

Voĭtišin, Ju. V. *See* **Kornilova, L. E., 80c:06004**

Wille, Rudolf *See* **Duffus, Dwight, 80i:06002** *and* **Rival, Ivan, 80j:06005**

Secondary classifications:

Amos, D. Bernard *See* **Nau, Dana S.; et al., (80a:92063)**

Brabec, Jiří Compatibility in orthomodular posets. (Russian and Czech summaries) **(80b:06008)**

Braude, Eric John Co-continuity. I. A Urysohn's lemma for partially ordered sets. **(80b:54001)**

Cogis, Olivier Détermination d'un préordre total contenant un préordre et contenu dans une relation de Ferrers, lorsque leur domaine commun est fini. (English summary) **(80j:04002)**

Daykin, David E. Poset functions commuting with the product and yielding Chebychev type inequalities. (French summary) **80g:06002**

Defays, D. Analyse hiérarchique des préférences et généralisations de la transitivité. **(80i:90009)**

Denig, W. A. *See* **Dowling, T. A., (80f:05017)**

Doner, John E. (*with* Mostowski, A. Włodzimierz; Tarski, Alfred) The elementary theory of well-ordering—a metamathematical study. **(80d:03027a)**

Dowling, T. A. (*with* Denig, W. A.) Geometries associated with partially ordered sets. **(80f:05017)**

Guz, Wawrzyniec On the simultaneous verifiability of yes-no measurements. **(80d:81003)**

Haftendorn, Dörte Additiv kommutative und idempotente Halbringe mit Faktorbedingung. II. **(80d:16025)**

Hovanov, N. V. A universal representation of relational systems. (Russian. English summary) **(80a:08002)**

Kleitman, Daniel J. *See* **West, Douglas B., (80i:05006)**

Klukowski, Julian (*with* Łapińska-Różalska, Cecylia) Post posets as a generalization of Post algebras. **(80f:06013)**

Landraitis, Charles A combinatorial property of the homomorphism relation between countable order types. **(80h:04001)**

Łapińska-Różalska, Cecylia *See* **Klukowski, Julian, (80f:06013)**

Markowsky, George *See* **Nau, Dana S.; et al., (80a:92063)**

Mostowski, A. Włodzimierz *See* **Doner, John E.; et al., (80d:03027a)**

Nau, Dana S. (*with* Markowsky, George; Woodbury, Max A.; Amos, D. Bernard) A mathematical analysis of human leukocyte antigen serology. **(80a:92063)**

Neggers, Joseph Counting finite posets. **(80a:05014)**

Nieminen, Juhani Screens and rounding mappings. **(80b:65054)**

Nowakowski, Richard (*with* Rival, Ivan) Fixed-edge theorem for graphs with loops. **(80j:05098)**

Poupard, Christiane Une correspondance entre deux familles de transformations définies sur l'ensemble des extensions linéaires d'un ordre partiel. (English summary) **(80h:90065)**

Rabinovitch, I. (*with* Rival, Ivan) The rank of a distributive lattice. **(80f:06010)**

Rival, Ivan *See* **Rabinovitch, I., (80f:06010)** *and* **Nowakowski, Richard, (80j:05098)**

Solomon, Louis Partially ordered sets with colors. **(80c:05011)**

Sonenberg, E. A. On the elementary theory of inductive order. **(80d:03027b)**

Steffens, Karsten Regressive functions and stationary sets. **(80f:03052)**

Strietz, Heinrich Vertauschungsverbände von Äquivalenzrelationen endlicher Mengen. **(80a:06007)**

Tarski, Alfred *See* **Doner, John E.; et al., (80d:03027a)**

Todorčević, S. On a property of partially ordered sets. **(80a:05075)**

West, Douglas B. (*with* Kleitman, Daniel J.) Skew chain orders and sets of rectangles. **(80i:05006)**

Woodbury, Max A. *See* **Nau, Dana S.; et al., (80a:92063)**

06A12 Semilattices [See also 20M10.]

Chandran, V. R. On two analogues of Cohen's theorem to join-semi-lattices. **80m:06004**

Cornish, William H. Modularity in semilattices. **80g:06003**

Era, Hiroshi *See* **Narushima, Hiroshi, 80a:06004**

Fofanova, T. S. Injective polygons over chains. (Russian. English summary) **80h:06003**

Hickman, Robert Congruence extensions for semilattices with distributivity. **80c:06007**

Jayaram, C. Sheaf representation of prime and distributive semilattices. **80c:06008**

Milić, Svetozar A proof and an extension of a theorem of G. Birkhoff. **80g:06004**

Narushima, Hiroshi (*with* Era, Hiroshi) A variant of inclusion-exclusion of semilattices. **80a:06004**

Nemitz, William C. Irreducibility in implicative semilattices. **80b:06003**

Pawar, Y. S. (*with* Thakare, Nimbakrishna) 0-distributive semilattices. **80f:06002**

Rao, K. Surya Koteswara Characterization of structure lattices of certain kinds of join semilattices. **80d:06004**

Sankappanavar, H. P. Congruence lattices of pseudocomplemented semilattices. **80j:06006**
Principal congruences of pseudocomplemented semilattices and congruence extension property. **80f:06003**

Širjaev, V. M. Semilattices of width 3 whose decomposable elements form a chain. **80e:06001**

Thakare, Nimbakrishna *See* **Pawar, Y. S., 80f:06002**

Secondary classifications:

Hamilton, Howard (*with* Nordahl, Thomas) Semigroups whose lattice of congruences is Boolean. **(80d:20058)**

McKenzie, R. (*with* Romanowska, Anna) Varieties of $\neg$-distributive bisemilattices. **(80h:06006)**

McMorris, F. R. An algebraic problem in taxonomy. **(80g:92005)**

Nordahl, Thomas *See* **Hamilton, Howard, (80d:20058)**

Pastijn, Francis Maximal subsemilattices of simple pseudo-inverse semigroups. **(80f:20067)**

Romanowska, Anna *See* **McKenzie, R., (80h:06006)**

Takizawa, Kiyoshi E-unitary $\mathcal{R}$-unipotent semigroups. **(80j:20069)**

Zeman, J. Jay Normal implications, bounded posets, and the existence of meets. **(80m:03048)**

06A15 Galois correspondences, closure operators

Barankin, Edward W. (*with* Takahasi, Koiti) Betweenness for real vectors and lines. I. Basic generalities. **80a:06005**

Flament, Claude Un théorème de point fixe dans les treillis. **80i:06005**

Kutinová, Blanka (*with* Sturm, Teo) On algebraic closures of compact elements. (Russian summary) **80i:06006**

Šmarda, Bohumil Polarity compatible with a closure system. **80b:06004**

Sturm, Teo *See* **Kutinová, Blanka, 80i:06006**

Takahasi, Koiti *See* **Barankin, Edward W., 80a:06005**

Secondary classifications:

Ahlswede, Rudolf (*with* Daykin, David E.) Inequalities for a pair of maps $S \times S \to S$ with S a finite set. **(80b:05009)**

Daykin, David E. *See* **Ahlswede, Rudolf, (80b:05009)**

Kastl, Jan Innere Translationen der kleinen Kategorien. (Russian and English summaries) **(80i:18009)**

Milićić, M. A multiplication of m-relations. **(80b:04002)**

Narushima, Hiroshi A survey of enumerative combinatorial theory and a problem. **(80i:05011)**

Pöschel, R. Concrete representation of algebraic structures and a general Galois theory. **(80h:08008)**

Rosenberg, Ivo G. On a Galois connection between algebras and relations and its applications. **(80h:08007)**

06A23 Complete lattices, completions

Ammonova, N. V. Global operations in quasi-ordered sets. (Russian) **80k:06002**
Ivert, P.-A. (*with* Sjödin, T.) On the impossibility of a finite propositional lattice for quantum mechanics. **80g:06005**
Lugowski, Herbert Über minimale Vervollständigungen halbgeordneter Mengen. (Russian and English summaries) **80i:06007**
Ryšlinková, Jana On m-algebraic closures of n-compact elements. **80h:06004**
The characterization of m-compact elements in some lattices. **80e:06002**
Sjödin, T. *See* **Ivert, P.-A., 80g:06005**

Secondary classifications:

Kutinová, Blanka (*with* Sturm, Teo) On algebraic closures of compact elements. (Russian summary) **80i:06006**
Rao, K. Surya Koteswara Characterization of structure lattices of certain kinds of join semilattices. **80d:06004**
Rosenský, Zdeněk Ein Beitrag zur Theorie der Orthogonalität auf Mengen. (Czech and Russian summaries) **80i:04003**
Steinfeld, Ottó On groupoidlattices. **80h:06018**
Sturm, Teo *See* **Kutinová, Blanka, 80i:06006**

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Chandran, V. R. A note on Padmanabhan's paper: "Regular identities in lattices" [Trans. Amer. Math. Soc. **158** (1971), 179–188; MR **43** #7376]. **80m:06005**
Ducamp, A. A note on an alternative proof of the representation theorem for bi-semiorder. **80a:06006**
Hedlíková, Jarmila Chains in modular ternary latticoids. (Russian summary) **80g:06006**
Kröger, H. Absorptionsaxiome in verallgemeinerten Verbänden. **80k:06003**
Monjardet, B. Axiomatiques et propriétés des quasi-ordres. (English summary) **80c:06009**
(Padmanabhan, R.) *See* **Chandran, V. R., 80m:06005**
Vagner, V. V. Introrestrictive factored ordered sets and projective systems of sets. (Russian) **80d:06005**
Introrestrictive factored and bifactored ordered sets. (Russian) **80i:06008**

Secondary classifications:

Adams, Ernest W. (*with* Carlstrom, Ian F.) Representing approximate ordering and equivalence relations. **(80j:92015)**
Carlstrom, Ian F. *See* **Adams, Ernest W., (80j:92015)**
Fischer, Thomas S. The prime spectrum of a Bézout ring. **(80a:13001)**
Jacquet-Lagreze, E. Représentation de quasi-ordres et de relations probabilistes transitives sous forme standard et méthodes d'approximation. (English summary) **(80b:90003)**
Yager, Ronald R. On solving fuzzy mathematical relationships. **(80f:03064)**

06Bxx Lattices [See also 03G10.]

Secondary classifications:

Benzaken, C. Post's closed systems and the weak chromatic number of hypergraphs. **(80a:05154)**
Petrich, Mario The ladder relation in groups, rings, lattices, and semigroups. **(80k:20035)**

06B05 Structure theory

Bol'bot, A. D. (*with* Kalinin, V. V.) Lattices with constraints for the sublattices. (Russian) **80h:06005**
Detlefsen, Michael E. Symmetric sublattices of a Noether lattice. **80c:06010**
Kalinin, V. V. *See* **Bol'bot, A. D., 80h:06005**
Katriňák, Tibor Subdirectly irreducible p-algebras. **80f:06004**
Kyuno, Shoji An inductive algorithm to construct finite lattices. **80b:06005**
Sobociński, Bolesław Equational two axiom bases for Boolean algebras and some other lattice theories. **80m:06006**
Stern, Manfred Baer lattices. II. **80e:06003a**
Baer lattices. III. **80e:06003b**
Strietz, Heinrich Vertauschungsverbände von Äquivalenzrelationen endlicher Mengen. **80a:06007**

Secondary classifications:

Duffus, Dwight (*with* Rival, Ivan) Separable subsets of a finite lattice. **(80k:06001)**
Nieminen, Juhani Screens and rounding mappings. **(80b:65054)**
Rival, Ivan *See* **Duffus, Dwight, (80k:06001)**

06B10 Ideals, congruence relations

Beazer, R. Regular double p-algebras with Stone congruence lattices. **80j:06007**
Cornish, William H. On the Chinese remainder theorem of H. Draškovičová. **80f:06005**
Kindermann, M. Über die Äquivalenz von Ordnungspolynomvollständigkeit und Toleranzeinfachheit endlicher Verbände. **80m:06007**
Kolibiar, M. The lattice of convex sublattices of a lattice. **80f:06006**
Rosenský, Zdeněk Verbände von Kernen der Abbildungen, die orthogonaltreu sind. (Czech and Russian summaries) **80j:06008**
Tomková, Mária On the b-equivalence of multilattices. (Russian summary) **80f:06007**
Uroşu, Carmencita On the connections between congruence relations and the neutral ideals of lattices. (Romanian. German summary) **80m:06008**
Zapletal, Josef Tolerance relation on a special type of lattice. (Czech. English and Russian summaries) **80b:06006**

Secondary classifications:

Andrews, George E. Partition ideals of order 1, the Rogers-Ramanujan identities and computers. **(80d:10027)**
Nieminen, Juhani Applications of lattice theory and ideals to graph theory. **(80c:05099)**
Varlet, J. Large congruences in p-algebras and double p-algebras. **(80f:06012)**

06B15 Representation theory

Banaschewski, B. Hulls, kernels, and continuous lattices. **80j:06009**
Marmaridis, Nikolaos Représentations linéaires des ensembles ordonnés. (English summary) **80c:06011**
Pudlák, P. Symmetric embedding of finite lattices into finite partition lattices. **80g:06007**
Sivák, Bohuslav Representations of finite lattices by orders on finite sets. (Russian summary) **80b:06007**

Secondary classifications:

Amos, D. Bernard *See* **Nau, Dana S.; et al., (80a:92063)**
Buekenhout, Francis Separation and dimension in a graph. **(80j:05078)**
Markowsky, George *See* **Nau, Dana S.; et al., (80a:92063)**
Nau, Dana S. (*with* Markowsky, George; Woodbury, Max A.; Amos, D. Bernard) A mathematical analysis of human leukocyte antigen serology. **(80a:92063)**
Woodbury, Max A. *See* **Nau, Dana S.; et al., (80a:92063)**

06B20 Varieties of lattices

McKenzie, R. (*with* Romanowska, Anna) Varieties of ω-distributive bisemilattices. **80h:06006**
Romanowska, Anna *See* **McKenzie, R., 80h:06006**

Secondary classifications:

Day, Alan Idempotents in the groupoid of all SP classes of lattices. **(80a:08008)**
Grätzer, George (*with* Lakser, H.) The lattice of quasivarieties of lattices. **(80b:08005)**
Lakser, H. *See* **Grätzer, George, (80b:08005)**

06B25 Free lattices, projective lattices, word problems [See also 03D40, 08A50, 20F10.]

Day, Alan (*with* Gaskill, Herb; Poguntke, Werner) Distributive lattices with finite projective covers. **80k:06004**
Freese, Ralph (*with* Nation, J. B.) Projective lattices. **80c:06012**
Gaskill, Herb *See* **Day, Alan; et al., 80k:06004**
Nation, J. B. *See* **Freese, Ralph, 80c:06012**
Poguntke, Werner *See* **Day, Alan; et al., 80k:06004**

Secondary classifications:

Huguet, Danièle (*with* Tamari, Dov) La structure polyédrale des complexes de parenthésages. **(80h:05016)**
Liber, S. A. Free compact lattices. (Russian) **(80c:06014)**
Rival, Ivan (*with* Wille, Rudolf) Lattices freely generated by partially ordered sets: which can be "drawn"? **(80j:06005)**
Tamari, Dov *See* **Huguet, Danièle, (80h:05016)**
Wille, Rudolf *See* **Rival, Ivan, (80j:06005)**

06B30 Topological lattices, order topologies [See also 06F30, 54F05, 54H12.]

Čilin, V. I. Ordered topologies in logics. (Russian) **80c:06013**
Clinkenbeard, Dennis J. Simple compact topological lattices. **80k:06005**
Liber, S. A. Free compact lattices. (Russian) **80c:06014**
Simmons, H. E. A framework for topology. **80b:06008**
Turinici, Mihai Maximal elements in partially ordered topological spaces and applications. **80h:06007**

Secondary classifications:

Hager, Anthony W. (*with* Robertson, Lewis C.) Extremal units in an Archimedean Riesz space. **(80k:46011)**
Robertson, Lewis C. *See* **Hager, Anthony W., (80k:46011)**
Stralka, Albert Quotients of products of compact chains. **(80h:22004)**
Wand, Mitchell Fixed-point constructions in order-enriched categories. **(80e:18002)**

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Andrunakievič, A. V. Idempotent lattices and the structure of rings. (Russian) **80a:06008**
Bacmann, Jean-Jacques Propriétés des réseaux de coïncidence et DSC. (English summary) **80d:06006**
Bauer, Heinz (*with* Poguntke, Werner) Lattices of width three: an example and a theorem. **80g:06008**
Blair, Charles E. (*with* Roth, Alvin E.) An extension and simple proof of a constrained lattice fixed point theorem. **80b:06009**
Ganti, Suryanarayana Murti Characterization of pseudo-metric lattices. **80a:06009**
Hess, Paul Dedekind's problem: monotone Boolean functions on the lattice of divisors of an integer. **80j:06010**
Poguntke, Werner *See* **Bauer, Heinz, 80g:06008**
Roth, Alvin E. *See* **Blair, Charles E., 80b:06009**

Secondary classifications:

Behara, M. (*with* Chawla, J. M. S.) Shannon and polynomial entropies as semivaluations on lattices. **(80k:94016)**
Chawla, J. M. S. *See* **Behara, M.**, **(80k:94016)**
Kantor, William M. Locally polar lattices. **(80e:51004)**
Kim, Ki Hang (*with* Roush, Fred W.) Reflexive lattices of subspaces. **(80h:15001)**
Lecointe, Pierre Réseaux $(R)_{k-1}$ et groupes d'automorphismes transitifs. **(80g:05016)**
Möhring, R. (*with* Radermacher, F. J.) Profiles and homomorphisms. **(80b:90059)**
Radermacher, F. J. *See* **Möhring, R.**, **(80b:90059)**
Rao, N. Prabhakara Seminormal autometrized algebras. **(80a:03074)**
Roush, Fred W. *See* **Kim, Ki Hang**, **(80h:15001)**
Rozen, V. V. Games with ordered outcomes and monocompactly generated lattices. (Russian) **(80g:90142)**
Tang, A. Chain properties in $P\omega$. **(80j:68009)**
Zelinka, Bohdan The lattice of all subtrees of a tree. (Russian summary) **(80f:05023)**

06Cxx Modular lattices, complemented lattices

06C05 Modular lattices, Desarguesian lattices

Anderson, D. D. (*with* Johnson, E. W.) Unique factorization and small regular local Noether lattices. **80m:06009**
Cignoli, Roberto Deductive systems and congruence relations in ortholattices. **80b:06010**
Johnson, E. W. *See* **Anderson, D. D.**, **80m:06009**
Miller, Ann Cancellative properties of k-modular and k-distributive lattices. **80g:06009**
Mitschke, A. (*with* Wille, Rudolf) Über freie modulare Verbände $FM(\mathfrak{H}, M)$. **80g:06010**
Nieminen, Juhani Operations on graphs determining congruences on graphs. **80a:06010**
Schmidt, Elégius Tamás Starre Quotienten in modularen Verbänden. **80g:06011**
Remarks on finitely projected modular lattices. **80e:06004**
Stern, Manfred Finite modular AC-lattices of the nth stage. (Russian) **80m:06010**
Tan, Tey On the lattice of sublattices of a modular lattice. **80b:06011**
Vilhelm, Václav Über die Charakterisierung der Verbände durch ihre c-Teilverbände. (Russian summary) **80g:06012**
Wille, Rudolf *See* **Mitschke, A.**, **80g:06010**

Secondary classifications:

Piziak, Robert Orthomodular lattices and quantum physics. **(80a:81004)**
Sobociński, Bolesław Equational two axiom bases for Boolean algebras and some other lattice theories. **(80m:06006)**

06C10 Semimodular lattices, geometric lattices

Jones, P. R. A homomorphic image of a semimodular lattice need not be semimodular: an answer to a problem of Birkhoff. **80b:06012**
Leclerc, Bruno Semi-modularité des treillis d'ultramétriques. (English summary) **80b:06013**

Secondary classifications:

Aerts, Dirk (*with* Piron, C.) The role of the modular pairs in the category of complete orthomodular lattice. **(80f:81008)**
Piron, C. *See* **Aerts, Dirk**, **(80f:81008)**

06C15 Complemented lattices, orthocomplemented lattices

Beran, Ladislav On finitely generated orthomodular lattices. **80j:06011**
Bruns, Günter Block-finite orthomodular lattices. **80k:06006**
Drurečenskij, Anatolij On convergences of signed states. (Russian summary) **80g:06013**
Metropolis, N. (*with* Rota, Gian-Carlo) Combinatorial structure of the faces of the n-cube. **80c:06015**
Rota, Gian-Carlo *See* **Metropolis, N.**, **80c:06015**
Szymańska-Bartman, Magdalena Orthogonality and orthocomplementation in partially ordered sets. **80j:06012**

Secondary classifications:

Aerts, Dirk (*with* Daubechies, Ingrid) A characterization of subsystems in physics. **(80f:81009a)**
(*with* Daubechies, Ingrid) A mathematical condition for a sublattice of a propositional system to represent a physical subsystem, with a physical interpretation. **(80f:81009b)**
Daubechies, Ingrid *See* **Aerts, Dirk**, **(80f:81009a)** *and* **Aerts, Dirk**, **(80f:81009b)**
Guz, Wawrzyniec On the lattice structure of quantum logics. **(80a:81005)**
Lambrou, M. S. Nontrivially pseudocomplemented lattices are complemented. **(80j:03087)**
Plotkin, G. T^{ω} as a universal domain. **(80d:68105)**
Stachow, E.-W. Quantum logical calculi and lattice structures. **(80f:81004)**
Zeman, J. Jay Quantum logic with implication. **(80m:03099)**

06C20 Complemented modular lattices, continuous geometries

Greechie, Richard J. An addendum to: "On generating distributive sublattices of orthomodular lattices" [Proc. Amer. Math. Soc. **67** (1977), no. 1, 17–22]. **80f:06008**
Kurinnij, G. Č. Necessary conditions of isometric imbeddability of a finite-dimensional modular lattice in a modular lattice with complements. (Russian) **80m:06011**
Savel'zon, O. I. 0-modular lattices. (Russian) **80m:06012**

06C99 None of the above, but in this section

Brabec, Jiří Compatibility in orthomodular posets. (Russian and Czech summaries) **80h:06008**
Gross, Herbert (*with* Hafner, Paul) The sublattice of an orthogonal pair in a modular lattice. **80e:06005**
Hafner, Paul *See* **Gross, Herbert**, **80e:06005**
Stern, Manfred Baer lattices. **80k:06007**

Secondary classifications:

Gudder, Stanley P. (*with* Michel, John R.) Embedding quantum logics in Hilbert space. **(80m:81012)**
Michel, John R. *See* **Gudder, Stanley P.**, **(80m:81012)**

06Dxx Distributive lattices

06D05 Structure and representation theory

Aubert, K. E. Ideal systems and lattice theory. III. **80m:06013**
Cornish, William H. The kernels of skeletal congruences on a distributive lattice. **80c:06016**
Daykin, David E. (*with* Kleitman, Daniel J.; West, Douglas B.) The number of meets between two subsets of a lattice. **80e:06006**
Kleitman, Daniel J. *See* **Daykin, David E.**; **et al.**, **80e:06006**
Koh, K. M. On finite distributive lattices whose Frattini sublattices are chains. **80e:06007**
Koubek, Václav Sublattices of a distributive lattice. **80f:06009**
Markowsky, George Free completely distributive lattices. **80c:06017**
Pašenkov, V. V. Imbeddings of distributive lattices in Boolean algebras. (Russian) **80m:06014**
Rabinovitch, I. (*with* Rival, Ivan) The rank of a distributive lattice. **80f:06010**
Rival, Ivan *See* **Rabinovitch, I.**, **80f:06010**
Schmid, Jürg Infinite distributivity in certain function lattices. **80a:06011**
West, Douglas B. *See* **Daykin, David E.**; **et al.**, **80e:06006**

Secondary classifications:

Balbes, Raymond On the partially ordered set of prime ideals of a distributive lattice. II. (Russian summary) **(80a:06001)**
Batbedat, André Le spectre d'un préanneau booléen. (Italian summary) **(80f:06009)**
Day, Alan (*with* Gaskill, Herb; Poguntke, Werner) Distributive lattices with finite projective covers. **(80k:06004)**
Gaskill, Herb *See* **Day, Alan**; **et al.**, **(80k:06004)**
Hofmann, Karl Heinrich (*with* Lawson, Jimmie D.) The spectral theory of distributive continuous lattices. **(80c:54045)**
Lawson, Jimmie D. *See* **Hofmann, Karl Heinrich**, **(80c:54045)**
Miller, Ann Cancellative properties of k-modular and k-distributive lattices. **(80g:06009)**
Poguntke, Werner *See* **Day, Alan**; **et al.**, **(80k:06004)**
Sobociński, Bolesław Equational two axiom bases for Boolean algebras and some other lattice theories. **(80m:06006)**

06D10 Complete distributivity

Mączyński, Maciej J. A generalization of A. Horn and A. Tarski's theorem on weak σ-distributivity. **80g:06014**

Secondary classifications:

Lambrou, M. S. Erratum to: "Semisimple completely distributive lattices are Boolean algebras" (Proc. Amer. Math. Soc. **68** (1978), no. 2, 217–219). **(80d:06010)**

06D15 Pseudocomplemented lattices

Katriňák, Tibor The free $\{0, 1\}$-distributive product of distributive p-algebras. **80e:06008**
Subdirectly irreducible double p-algebras of finite range. **80k:06009**
Varlet, J. Nodes of the congruence lattice of a distributive p-algebra. **80f:06011**
Large congruences in p-algebras and double p-algebras. **80f:06012**

Secondary classifications:

Adams, M. E. (*with* Sichler, J.) Endomorphism monoids of distributive double p-algebras. **(80g:08006)**
Hutton, Bruce Products of fuzzy topological spaces. **(80m:54009)**
Sankappanavar, H. P. Congruence lattices of pseudocomplemented semilattices. **(80j:06006)**
Sichler, J. *See* **Adams, M. E.**, **(80g:08006)**

06D20 Heyting algebras [See also 03Gxx.]

Secondary classifications:

Becchio, Denise Deux définitions des algèbres de Heyting trivalentes involutives. **(80m:03103)**
Davey, Brian A. On the lattice of subvarieties. **(80j:08007)**
Di Sieno, Simonetta (*with* Galuzzi, Massimo) Categories based on a Heyting algebra. (Italian. English summary) **(80h:18005)**
Galuzzi, Massimo *See* **Di Sieno, Simonetta**, **(80h:18005)**
Ursini, Aldo Intuitionistic diagonalizable algebras. **(80m:03108)**

06D25 Post algebras [See also 03G20.]

Klukowski, Julian (*with* Łapińska-Różalska, Cecylia) Post posets as a generalization of Post algebras. **80f:06013**
Łapińska-Różalska, Cecylia *See* **Klukowski, Julian, 80f:06013**
Yaqub, Fawzi M. Free Post L-algebras. **80b:06014**

Secondary classifications:

Becchio, Denise (*with* Iturrioz, L.) Sur une définition des algèbres de Łukasiewicz et de Post d'ordre n. **(80h:03094)**
Iturrioz, L. *See* **Becchio, Denise, (80h:03094)**
Lau, Dietlinde Über die Anzahl von abgeschlossnen Mengen linearer Funktionen der n-wertigen Logik. (English and Russian summaries) **(80c:03026)**

06D30 DeMorgan algebras, Łukasiewicz algebras [See also 03G20.]

Cornish, William H. (*with* Fowler, Peter R.) Coproducts of Kleene algebras. **80f:06014**
Fowler, Peter R. *See* **Cornish, William H., 80f:06014**

Secondary classifications:

Becchio, Denise (*with* Iturrioz, L.) Sur une définition des algèbres de Łukasiewicz et de Post d'ordre n. **(80h:03094)**
Sur l'axiome d'Ivo Thomas. **(80m:03104)**
Iséki, Kiyoshi Some examples of Griss algebras. **(80a:03086a)**
On definitions of Griss algebras. **(80a:03086b)**
A new class of Griss type algebras. **(80a:03086c)**
Iturrioz, L. *See* **Becchio, Denise, (80h:03094)**
Ponasse, Daniel Algèbres floues et algèbres de Lukasiewicz. **(80d:03063)**
Varlet, J. Large congruences in p-algebras and double p-algebras. **(80f:06012)**

06D99 None of the above, but in this section

Bandelt, H.-J. (*with* Padmanabhan, R.) A note on lattices with unique comparable complements. **80g:06015**
Dorninger, D. Local polynomial functions on distributive lattices. **80d:06007**
Iséki, Kiyoshi Some problems on BCK-algebras with condition (S). **80c:06019**
Kornienko, V. S. Self-injective distributive lattices. (Russian) **80k:06008**
Monjardet, B. Caractérisations et propriété de Sperner des treillis distributifs planaires finis. (English summary) **80g:06016**
Nowakowski, Richard (*with* Rival, Ivan) Distributive cover-preserving sublattices of modular lattices. **80f:06015**
Padmanabhan, R. *See* **Bandelt, H.-J., 80g:06015**
Rival, Ivan *See* **Nowakowski, Richard, 80f:06015**
Sosobe, Osamu A note on R-S lemma. **80f:06016**
Thabeem, A. B. Remarks on commutative BCK-algebras. **80c:06018**

Secondary classifications:

Ahsan, Javed (*with* Deeba, Elias Y.) On ideals in implicative BCK-algebras. **(80a:03078)**
Baker, Kirby A. Congruence-distributive polynomial reducts of lattices. **(80c:08005)**
Buajatov, M. R. (*with* Nasr Ibragim, Ahmed Helmi Muhammed) Homology of distributive lattices. (Russian) **(80k:55023)**
Čilin, V. I. Continuous valuations on logics. (Russian) **(80j:03088)**
Deeba, Elias Y. *See* **Ahsan, Javed, (80a:03078)**
Grandis, Marco Exact categories and distributive lattices. Orthodox symmetrizations. II. **(80g:18011a)**
Exact categories and orthodox symmetrizations. Orthodox symmetrizations. III. (Italian summary) **(80g:18011b)**
Iséki, Kiyoshi (*with* Tanaka, Shôtarô) An introduction to the theory of BCK-algebras. **(80a:03081)**
On commutative BCK-algebras with condition (S). **(80a:03082)**
Remarks on BCK-algebras with condition (S). **(80j:03090a)**
BCK-algebras with condition (S). **(80m:03107)**
Nasr Ibragim, Ahmed Helmi Muhammed *See* **Buajatov, M. R., (80k:55023)**
Nieminen, Juhani The ideal structure of simple ternary algebras. **(80c:20095)**
Olin, Philip Aleph-zero categorical Stone algebras. **(80a:03043)**
Repnickiĭ, V. B. Arithmetic modules. (Russian) **(80m:13002)**
Schmid, Jürg Algebraically and existentially closed distributive lattices. **(80j:03046)**
Servi, Mario An axiomatization of existential lattices. (Italian. English summary) **(80g:03061)**
Tanaka, Shôtarô *See* **Iséki, Kiyoshi, (80a:03081)**
Thabeem, A. B. Equivalent conditions for some ideals in BCK-algebras. **(80a:03087)**
On complete BCK-algebras. **(80a:03088)**
Characterizations of certain ideals in implicative BCK-algebras. **(80j:03090b)**
Urquhart, Alasdair Distributive lattices with a dual homomorphic operation. **(80i:03071)**
Yutani, Hiroshi Categoricity in the theory of BCK-algebras. **(80a:03084)**
Congruences on the products of BCK-algebras. **(80a:03085)**
Coequalizer in the category of BCK-algebras. II. **(80k:18014)**

06Exx Boolean algebras [See also 03G05.]

Bong, Uwe ★Boolesche Algebra. **80d:06008**

Secondary classifications:

Štěpánek, Petr Cardinals in the inner model HOD. **(80b:03080b)**
Cardinal collapsing and ordinal definability. **(80b:03080a)**

06E05 Structure theory

Abian, Alexander Inducive Boolean algebras and their special prime ideals. **80j:06013**
Kakuda, Yuzuru Saturation of ideals and pseudo-Boolean algebras of ideals on sets. **80d:06009**
Konstantinidou, Marie *See* **Mittas, Jean, 80j:06014**
Loats, James T. Hopfian Boolean algebras of power less than or equal to continuum. **80h:06010**
Mittas, Jean (*with* Konstantinidou, Marie) Introduction à l'hyperalgèbre de Boole. **80j:06014**
Mori, Tôru On Boolean algebras whose Stone spaces have at most one nonisolated point. **80h:06011**
Sudkamp, Thomas A. An additional remark on self-conjugate functions of Boolean algebras. **80a:06012**

Secondary classifications:

Fischer, Thomas S. The maximal ideal space of a Bézout ring. **(80b:13002)**
Mead, Jerud Recursive prime models for Boolean algebras. **(80j:03050)**
Obtułowicz, Adam (*with* Sokolnicki, Krzysztof) On the algebraic theory of Boolean algebras. (Russian summary) **(80a:18002a)**
Schrijver, Alexander The dependence of some logical axioms on disjoint transversals and linked systems. **(80a:03065)**
Sobociński, Bolesław Equational two axiom bases for Boolean algebras and some other lattice theories. **(80m:06006)**
Sokolnicki, Krzysztof *See* **Obtułowicz, Adam, (80a:18002a)**

06E10 Chain conditions, complete algebras

Monk, J. Donald (*with* Rassbach, W.) The number of rigid Boolean algebras. **80c:06020**
Rassbach, W. *See* **Monk, J. Donald, 80c:06020**
Traczyk, Tadeusz Completeness of ideals of a Boolean algebra. **80a:06013**

Secondary classifications:

Baumgartner, James E. (*with* Taylor, Alan; Wagon, Stanley) Ideals on uncountable cardinals. **(80c:03058)**
Kornienko, V. S. Self-injective distributive lattices. (Russian) **(80k:06008)**
Taylor, Alan *See* **Baumgartner, James E.; et al., (80c:03058)**
Wagon, Stanley *See* **Baumgartner, James E.; et al., (80c:03058)**

06E15 Topological representation

Batbedat, André Le spectre d'un préanneau booléen. (Italian summary) **80i:06009**
Carrega, Jean-Claude *See* **Ponasse, Daniel, 80j:06015**
Gonshor, Harry Enlargements of Boolean algebras and Stone space. **80g:06017**
Ponasse, Daniel (*with* Carrega, Jean-Claude) ★Algèbre et topologie booléennes. **80j:06015**
Wroński, Stanisław On fields of sets with a nowhere dense boundary. **80m:06015**

Secondary classifications:

Nasr Ibragim, Ahmed Helmi Muhammed Homotopy in the spectral homology theory homologies of Boolean algebras with closure. (Russian) **(80k:55021)**

06E20 Boolean rings [See also 16A30, 16A32.]

Secondary classifications:

Carrega, Jean-Claude *See* **Ponasse, Daniel, (80j:06015)**
Ponasse, Daniel (*with* Carrega, Jean-Claude) ★Algèbre et topologie booléennes. **(80j:06015)**
Rubin, Matatyahu On the automorphism groups of homogeneous and saturated Boolean algebras. **(80d:03032)**

06E99 None of the above, but in this section

èl'-Din Agami, Raga Muhammed Baha The cohomology of uniform Boolean algebras. (Russian. Azerbaijani and English summaries) **80a:06014**
Ganti, Suryanarayana Murti Boolean normed lattices. **80c:06021**
Gronau, Hans-Dietrich On the generation of binary vectors by some closed sets of Boolean functions (linear functions and alternatives). **80a:06015**
On the generation of binary vectors by Boolean functions. (Hungarian and Russian summaries) **80i:06010**
Iséki, Kiyoshi (*with* Rama Rao, V. V.) Note on BCK-algebras with condition (S). **80j:06016**
Lambrou, M. S. Erratum to: "Semisimple completely distributive lattices are Boolean algebras" (Proc. Amer. Math. Soc. **68** (1978), no. 2, 217–219). **80d:06010**
Misra, S. S. *See* **Naik, N.; et al., 80d:06011**
Naik, N. (*with* Swamy, B. L. N.; Misra, S. S.) A note on difference sets in Boolean algebras. **80d:06011**
Rama Rao, V. V. *See* **Iséki, Kiyoshi, 80j:06016**
Rao, K. P. S. Bhaskara (*with* Rao, M. Bhaskara) On the lattice of subalgebras of a Boolean algebra. (Russian summary) **80j:06017**
Rao, M. Bhaskara *See* **Rao, K. P. S. Bhaskara, 80j:06017**
Swamy, B. L. N. *See* **Naik, N.; et al., 80d:06011**

Secondary classifications:

Agami, Raga Mohamed Baha èl'-Din The cohomology for inverse spectra of chain complexes and Boolean algebras. (Russian. Azerbaijani and English summaries) **(80f:55009)**

Berman, Gerald (*with* Colijn, A. W.) Boolean minimization using free Boolean algebras. **(80g:94080)**
Brink, Chris Two axiom systems for relation algebras. **(80m:03101)**
Colijn, A. W. *See* **Berman, Gerald, (80g:94080)**
Czelakowski, Janusz Partial Boolean algebras in a broader sense. **(80k:03067)**
(Eisenreich, Günther) *See* **Vladimirov, D. A., (80b:06001)**
Gómez-González, Lorenzo Concerning the maximum number of essential prime implicants in a Boolean function. **(80c:94022)**
Jech, Thomas A game theoretic property of Boolean algebras. **(80c:90184)**
Loats, James T. (*with* Rubin, Matatyahu) Boolean algebras without nontrivial onto endomorphisms exist in every uncountable cardinality. **(80f:03071)**
Mączyński, Maciej J. A generalization of A. Horn and A. Tarski's theorem on weak σ-distributivity. **(80g:06014)**
Paichkov, V. V. Imbeddings of distributive lattices in Boolean algebras. (Russian) **(80m:06014)**
Rubin, Matatyahu *See* **Loats, James T., (80f:03071)**
Vladimirov, D. A. ★Boolesche Algebren. **(80b:06001)**
Wilmański, K. Localization problem of nonlocal continuum theories. (Polish and Russian summaries) **(80h:73006)**

06Fxx Ordered structures [See also 22A26, 54F05.]

06F05 Ordered semigroups [See also 20Mxx.]

Adámek, Jiří (*with* Koubek, Václav) On representations of ordered commutative semigroups. **80h:06012**
Bredikhin, D. A. Ordered involuted semigroups of quasicomplete binary relations. (Russian) **80m:06016**
Fakhruddin, Syed M. Localisations dans la catégorie des Γ-ensembles totalement ordonnées. **80g:06018**
Jayaram, C. (*with* Rama Rao, V. V.) Characterization of a class of dually residuated lattice ordered semigroups by sheaves. **80b:06015**
Koubek, Václav *See* **Adámek, Jiří, 80h:06012**
Merlier, Thérèse Totally orderable semigroups and locally finite semigroups. **80j:06018**
Mitsch, H. Inverse semigroups and their natural order. **80c:06022**
Nagore, C. Sri Hari *See* **Satyanarayana, M., 80f:06012** *and* **Satyanarayana, M., 80f:06013**
Rama Rao, V. V. Semi-dually residuated lattice ordered semigroup. **80d:06012**
See also **Jayaram, C., 80b:06015**
Rao, N. Prabhakara Brouwerian semigroups. **80e:06009**
Satyanarayana, M. Naturally totally ordered semigroups. **80b:06016**
★Positively ordered semigroups. **80f:06011**
(*with* Nagore, C. Sri Hari) Integrally ordered semigroups. **80f:06012**
(*with* Nagore, C. Sri Hari) On naturally ordered semigroups. **80f:06013**
Shamely, Zahava The lattice of idempotent binary relations. **80k:06009**
Tararin, V. M. Ordered quasigroups. (Russian) **80f:06014**
Želeva, S. D. On the problem of isomorphism of a partially ordered semigroup. (Bulgarian. Russian and English summaries) **80f:06017**
Representation of partially right-ordered semigroups that are defined by inequalities. (Bulgarian. Russian and English summaries) **80f:06015**

Secondary classifications:

Bredikhin, D. A. (*with* Schein, Boris M.) Representations of ordered semigroups and lattices by binary relations. **(80c:20093)**
Gale, David (*with* Tamura, Takayuki) Maximal cancellative subsemigroups and sub-Archimedeanness. **(80f:20034)**
Iséki, Kiyoshi Remarks on BCK-algebras with condition (S). **(80j:03090a)**
van Leeuwen, Jan Effective constructions in well-partially-ordered free monoids. **(80c:68055)**
Schein, Boris M. *See* **Bredikhin, D. A., (80c:20093)**
Tamura, Takayuki Recent results and problems on commutative Archimedean semigroups. **(80f:20050)**
See also **Gale, David, (80f:20034)**

06F10 Noether lattices

06F15 Ordered groups [See also 20F60.]

Anderson, Marlow The essential closure of $C(X)$. **80g:06019**
Chehata, C. G. (*with* Wiegandt, Richard) Radical theory for fully ordered groups. **80g:06020**
Fox, Colin D. Can a Fibonacci group be a unique products group? **80h:06013**
Glass, A. M. W. Compatible tight Riesz orders. II. **80h:06014**
Holland, W. Charles (*with* Martinez, Jorge) Accessibility of torsion classes. **80g:06021**
Varieties of l-groups are torsion classes. **80b:06017**
(*with* McCleary, Stephen H.) Solvability of the word problem in free lattice-ordered groups. **80f:06018**
Kolbunov, A. V. A construction of the o-completion of Archimedean l-groups with order identity. (Russian) **80m:06017**
Martinez, Jorge *See* **Holland, W. Charles, 80g:06021**
McCleary, Stephen H. *See* **Holland, W. Charles, 80f:06018**
Miller, John Boris Direct summands in l-groups. **80b:06018**
Perić, Veselin Sur l'existence d'une partie confinale dénombrable dans un groupe ordonné linéairement. (Serbo-Croatian summary) **80b:06019**
Pierčinov, V. I. The structure of lattice-ordered groups with a topology. (Russian) **80m:06018**
Sizer, Walter S. Group retractions induced by a total order. **80j:06019**
Wiegandt, Richard *See* **Chehata, C. G., 80g:06020**

Secondary classifications:

Buszkowski, Wojciech Undecidability of the theory of lattice-orderable groups. **(80m:03078)**

06F20 Ordered abelian groups, ordered linear spaces [See also 46A40.]

Abagjan, A. G. The Archimedean property of partially ordered abelian groups. (Russian) **80m:06019**
Černák, Štefan On some types of maximal l-subgroups of a lattice ordered group. (Russian summary) **80h:06015**
Elliott, George A. A property of totally ordered abelian groups. **80c:06023**
Metzler, Richard C. Representation of pseudolattice ordered vector spaces. **80h:06016**
Miller, John Boris The order-dual of a TRL group. I. **80f:06019**
Močkoř, Jiří Topological groups of divisibility. **80i:06016**
Moresco, Roberto Ordered groups and fields. (Italian. English summary) **80m:06020**
Noll, Walter (*with* Schäffer, Juan Jorge) Corrigenda to the paper: "Orders, gauge, and distance in faceless linear cones: with examples relevant to continuum mechanics and relativity" (Arch. Rational Mech. Anal. **66** (1977), no. 4, 345–377). **80h:06020**
Schäffer, Juan Jorge *See* **Noll, Walter, 80h:06020**

Secondary classifications:

Higashiyama, Teiko A certain example of non-Archimedean directed ordered vector spaces. **(80i:46059)**
Nordman, Hasse Order convergence and order topology. **(80j:46017)**
Ranga Rao, P. Metric spaces with distances in a lattice ordered group. **(80a:52017)**

06F25 Ordered rings, algebras, modules {For ordered fields, see 10M15, 12J15; see also 13J25, 16A86.}

Fontana, Marco Absolutely flat Baer rings. (Italian summary) **80k:06010**
Fox, Colin D. On localizing orderable modules. **80a:06016**
Selivanov, Ju. A. A survey of ordered loops. I. **80c:06024a**
A survey of ordered loops. II. **80c:06024b**
Semençov, O. V. Linear equations over lattice-ordered rings. (Russian) **80g:06022**

Secondary classifications:

Bhandari, M. C. *See* **Radhakrishna, A., (80d:16023)**
Breckner, Wolfgang W. (*with* Scheiber, Ernest) A Hahn-Banach type extension theorem for linear mappings into ordered modules. **(80g:46008)**
Koldunov, A. V. *See* **Veksler, A. I., (80g:54019)**
Radhakrishna, A. (*with* Bhandari, M. C.) On lattice ordered near-rings. **(80d:16023)**
Salazar, Tomas Eufracio An abstract matrix model: the column model. **(80k:15029)**
Scheiber, Ernest *See* **Breckner, Wolfgang W., (80g:46008)**
Veksler, A. I. (*with* Koldunov, A. V.) Sequential majorizability in vector lattices. (Russian) **(80g:54019)**
Vura, Dan A generalisation of Ghika rings. (Romanian. French summary) **(80k:46053)**

06F30 Topological lattices, order topologies [See also 06B30, 54F05, 54H12.]

Hofmann, Karl Heinrich Continuous lattices, topology and topological algebra. **80k:06011**
Bibliography:
Continuous lattices, topology and topological algebra *See* **Hofmann, Karl Heinrich, 80k:06011**

Secondary classifications:

Flösser, Hans-Otto (*with* Gierz, G.; Keimel, Klaus) Structure spaces and the center of vector lattices. **(80c:46012)**
Gierz, G. *See* **Flösser, Hans-Otto; et al., (80c:46012)**
Keimel, Klaus *See* **Flösser, Hans-Otto; et al., (80c:46012)**
Močkoř, Jiří Topological groups of divisibility. **(80i:06016)**

06F99 None of the above, but in this section

Čanak, Bosiljka *See* **Gilezan, Koriolan, 80d:06013**
Gilezan, Koriolan (*with* Čanak, Bosiljka) Quelques formes générales des fonctions pseudo-booléennes. **80d:06013**
Greenleaf, Newcomb Linear order in lattices: a constructive study. **80c:06025**
Lal, P. K. *See* **Lal, R. N., 80h:06017**
Lal, R. N. (*with* Lal, P. K.) Proximal lattice. **80h:06017**
Rama Rao, V. V. ★On a problem of Garrett Birkhoff and related topics. **80b:06021**
Steinfeld, Otto On groupoidlattices. **80k:06018**

08–XX GENERAL MATHEMATICAL SYSTEMS

08–01 Elementary exposition, textbooks

Hule, Harald Amalgamation of universal algebras. (Portuguese) **80d:08001**
Algebraic structures: universal algebra. (Portuguese) **80d:08002**
Ježek, Jaroslav ★Univerzální algebra a teorie modelů. (Czech) [Universal algebra and model theory] **80f:08001**
Werner, Heinrich ★Einführung in die allgemeine Algebra. **80k:08001**

08–02 Advanced exposition (research surveys, monographs, etc.)

Grätzer, George ★Universal algebra. **80g:08001**

Hatcher, William S. (*with* Whitney, Stephen) ★Absolute algebra. **80a:08001**
Whitney, Stephen *See* **Hatcher, William S., 80a:08001**

Secondary classifications:

Taylor, Walter Equational logic. **(80j:03042)**

08–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Mehrtens, Herbert ★Die Entstehung der Verbandstheorie. **(80m:01028)**

08–04 Explicit machine computation and programs (not the theory of computation or programming)

08–06 Proceedings, conferences, etc.

Secondary classifications:

(Kautschitsch, Hermann) *See* **Contributions to general algebra, (80d:00007)**
(Müller, Winfried B.) *See* **Contributions to general algebra, (80d:00007)**
(Nöbauer, Wilfried) *See* **Contributions to general algebra, (80d:00007)**
Algebra *See* **Contributions to general algebra, (80d:00007)**
Conference:
Klagenfurt, Contributions to General Algebra *See* **Contributions to general algebra, (80d:00007)**
Contributions to general algebra ★Contributions to general algebra. **(80d:00007)**
Klagenfurt *See* **Contributions to general algebra, (80d:00007)**

08Axx Universal algebra [See also 03C05.]

Secondary classifications:

Davey, Brian A. (*with* Werner, Heinrich) Injectivity and Boolean powers. **(80b:08004)**
Werner, Heinrich *See* **Davey, Brian A., (80b:08004)**

08A02 Relational systems, laws of composition

08A05 Structure theory

Aissen, Michael (*with* Shay, Brian) Nonassociative multiplication. **80b:08002**
Batbedat, André Spectres des algèbres à produit. (English summary) **80e:08001**
Clark, David M. *See* **Krauss, Peter H., 80b:08001**
Gervacio, Severino V. On the existence of weak direct products of algebras. **80g:08002**
Graczyńska, E. (*with* Wroński, Andrzej) On normal Agassiz systems of algebras. **80h:08003a**
(*with* Wroński, Andrzej) On weak Agassiz systems of algebras. **80h:08003b**
Hovanov, N. V. A universal representation of relational systems. (Russian. English summary) **80a:08002**
Kaiser, H. K. A remark on algebras with the interpolation property. **80i:08001**
Krauss, Peter H. (*with* Clark, David M.) Global subdirect products. **80b:08001**
Lender, V. B. $\mathfrak{N}$NA-solvable structures. (Russian) **80i:08002**
Murskiĭ, V. L. The number of k-element algebras with a binary operation which do not have a finite basis of identities. (Russian) **80i:08003**
Schein, Boris M. (*with* Trohimenko, Valentin S.) Algebras of multiplace functions. **80e:08002**
Shay, Brian *See* **Aissen, Michael, 80b:08002**
Strano, Rosario Some properties of associative Ω-rings. (Italian. English summary) **80j:08001**
Taĭmanov, A. D. The topologization of countable algebras. (Russian) **80d:08003**
Trohimenko, Valentin S. *See* **Schein, Boris M., 80e:08002**
Wroński, Andrzej *See* **Graczyńska, E., 80h:08003a** *and* **Graczyńska, E., 80h:08003b**

Secondary classifications:

Bol'bot, A. D. (*with* Kalinin, V. V.) Lattices with constraints for the sublattices. (Russian) **(80h:06005)**
Căzănescu, Virgil Emil Catégories d'algèbres universelles. II. **(80k:18008)**
Hatcher, William S. (*with* Whitney, Stephen) ★Absolute algebra. **(80a:08001)**
Iséki, Kiyoshi Some problems on BCK-algebras with condition (S). **(80c:06019)**
Istinger, M. (*with* Kaiser, H. K.) A characterization of polynomially complete algebras. **(80e:08004)**
Kaiser, H. K. *See* **Istinger, M., (80e:08004)**
Kalinin, V. V. *See* **Bol'bot, A. D., (80h:06005)**
Katriňák, Tibor Subdirectly irreducible p-algebras. **(80f:06004)**
Romanowska, Anna On free algebras in some equational classes defined by regular equations. **(80h:08013)**
Thabeem, A. B. Remarks on commutative BCK-algebras. **(80c:06018)**
Whitney, Stephen *See* **Hatcher, William S., (80a:08001)**

08A30 Subalgebras, congruence relations

Aragane, Kenichi (*with* Fujiwara, Tsuyoshi) On a problem of Lausch and Nöbauer. **80g:08003**
Baĭramov, R. A. Subalgebras with a given σ_k-component that are maximal in P_k and subalgebras with an ideal $\Omega_{k,k-1}$-component that are maximal in P_k. (Russian) **80i:08004**
Burmeister, P. Some remarks concerning the abstract interdependence between the endomorphism monoid and the congruence lattice of a universal algebra. **80k:08004**
Egorova, D. P. The congruence lattice of a unary algebra. (Russian) **80k:08001**
Fujiwara, Tsuyoshi *See* **Aragane, Kenichi, 80g:08003**
Gumm, H. Peter Über die Lösungsmengen von Gleichungssystemen über allgemeinen Algebren. **80c:08001**
Hule, Harald On congruences in general algebraic structures. (Portuguese) **80m:08001**
Karigl, Günther Über die Kongruenzverbände von Funktionenalgebren. **80d:08004**
A note on the congruence lattice of arbitrary infinite function algebras. **80m:08002**
Kollár, János Automorphism groups of subalgebras; a concrete characterization. **80d:08005**
Maurer, I. Gy. (*with* Virág, I.) Sur les classes de tolérance d'une algèbre universelle. **80a:08003**
Pouzet, Maurice Relations non reconstructibles par leurs restrictions. **80d:08006**
Rival, Ivan (*with* Sands, Bill) A note on the congruence lattice of a finitely generated algebra. **80d:08007**
Sands, Bill *See* **Rival, Ivan, 80d:08007**
Virág, I. *See* **Maurer, I. Gy., 80a:08003**
Węglorz, Bogdan Invariant ideals and fields of subsets of abstract algebras. **80g:08004**
Werner, Heinrich A generalization of Comer's sheaf-representation theorem. **80g:08005**

Secondary classifications:

Beazer, R. Regular double p-algebras with Stone congruence lattices. **(80j:06007)**
Gumm, H. Peter Algebras in permutable varieties: geometrical properties of affine algebras. **(80d:08010)**
Kollár, János Congruences and one element subalgebras. **(80d:08011)**
Tiuryn, Jerzy Fixed-points and algebras with infinitely long expressions. I. Regular algebras. **(80a:68049)**

08A35 Automorphisms, endomorphisms

Adams, M. E. (*with* Sichler, J.) Endomorphism monoids of distributive double p-algebras. **80g:08006**
Fried, Ervin (*with* Sichler, J.) On automorphism groups of subalgebras of a universal algebra. **80f:08002**
Gilliam, David W. H. A concrete representation theorem for intervals of multirelations. **80a:08004**
Sichler, J. *See* **Fried, Ervin, 80f:08002** *and* **Adams, M. E., 80g:08006**

Secondary classifications:

Kollár, János Automorphism groups of subalgebras; a concrete characterization. **(80d:08005)**

08A40 Operations, polynomials, primal algebras

Csákány, B. Homogeneous algebras. **80m:08003**
Eigenthaler, G. On direct products of algebras of polynomials and polynomial functions. **80m:08004**
Filipoiu, Alexandru Many-sorted polynomials and algebras of polynomials. (Romanian. English summary) **80e:08003**
Fried, Ervin (*with* Pixley, A. F.) The dual discriminator function in universal algebra. **80g:08007**
Henno, Jaak On idempotents and Green relations in the algebras of many-placed functions. **80h:08005**
On the completeness of associative idempotent functions. **80h:08006**
Istinger, M. (*with* Kaiser, H. K.) A characterization of polynomially complete algebras. **80e:08004**
Kaiser, H. K. *See* **Istinger, M., 80e:08004**
Lausch, Hans (*with* Nöbauer, Wilfried) Local polynomial functions on factor rings of the integers. **80g:08008**
Nöbauer, Wilfried *See* **Lausch, Hans, 80g:08008**
Pixley, A. F. *See* **Fried, Ervin, 80g:08007**
Pöschel, R. Concrete representation of algebraic structures and a general Galois theory. **80h:08008**
Rosenberg, Ivo G. On a Galois connection between algebras and relations and its applications. **80h:08007**
Schweigert, D. On semigroups of polynomial functions. **80j:08002**
Szendrei, Á. On weakly commuting operations. **80g:08009**

Secondary classifications:

Karigl, Günther Über die Kongruenzverbände von Funktionenalgebren. **(80d:08004)**
Lau, Dietlinde Bestimmung der Ordnung maximaler Klassen von Funktionen der k-wertigen Logik. **(80i:03039)**
Lausch, Hans Interpolation on the alternating group A_5. **(80i:20002)**
Rodriguez Fernández, C. General theory of varieties. (Spanish) **(80b:18008)**

08A45 Equational compactness

Bulman-Fleming, Sydney (*with* Fleischer, Isidore; Keimel, Klaus) The semilattices with distinguished endomorphisms which are equationally compact. **80d:08008**
Fleischer, Isidore *See* **Bulman-Fleming, Sydney; et al., 80d:08008**
Keimel, Klaus *See* **Bulman-Fleming, Sydney; et al., 80d:08008**
Kim, Ki Hang (*with* Roush, Fred W.) A universal algebra approach to free projective planes. **80j:08003**
Roush, Fred W. *See* **Kim, Ki Hang, 80j:08003**

Secondary classifications:

Ryčkov, S. S. (*with* Stepanov, V. I.) A characterization of the algebraic compactness of abelian groups. (Russian) **(80k:20054)**
Stepanov, V. I. *See* **Ryčkov, S. S., (80k:20054)**

08A50 Word problems [See also 03D40, 20F10.]

Austin, A. K. A note on decision procedures for identities. **80b:08002**

Secondary classifications:

Grinbergs, A. Unification of varieties of pairs. (Russian) **(80g:08014)**

08A55 Partial algebras

Fleischer, Isidore (*with* Rosenberg, Ivo G.) The Galois connection between partial functions and relations. **80m:08005**
Mikenberg, Irene From total to partial algebras. **80f:08003**
Rosenberg, Ivo G. *See* **Fleischer, Isidore, 80m:08005**

08A60 Unary algebras

Abrhan, Imrich ϑ-subalgebras in unary algebras, prime ideals and ϑ-ideals in groupoids and in semigroups. (Russian. English summary) **80g:08010**
Bulman-Fleming, Sydney (*with* McDowell, Kenneth) The category of mono-unary algebras. **80i:08005**
Chvalina, Jan Characterizations of certain monounary algebras. I. **80e:08005a**
Characterizations of certain monounary algebras. II. **80e:08005b**
Gavalec, Martin (*with* Jakubíková, Danica) The width of the category of mono-unary algebras. (Russian) **80h:08009**
Jakubíková, Danica *See* **Gavalec, Martin, 80h:08009**
McDowell, Kenneth *See* **Bulman-Fleming, Sydney, 80i:08005**
Skornjakov, L. A. Unary algebras with regular endomorphism monoids. **80c:08002**
Smirnov, D. M. The correspondence between regularly definable varieties of unary algebras and semigroups. (Russian) **80g:08011**

Secondary classifications:

Kopeček, Oldřich Homomorphisms of machines. I. **(80b:68074a)**
Homomorphisms of machines. II. **(80b:68074b)**

08A65 Infinitary algebras

08A99 None of the above, but in this section

Buszkowski, Wojciech Divisibility in abstract algebras. **80k:08002**
Chajda, Ivan On the tolerance extension property. (Czech summary) **80c:08003**
Day, Brian J. On injective profinite algebras. **80g:08012**
On profiniteness of compact totally disconnected algebras. **80j:08004**
Eugeni, Franco (*with* Rizzi, Bruno) On some extensions of algebraic structures. (Italian) **80e:08006**
Fried, Ervin A note on congruence extension property. **80a:08005**
Govaerts, W. Decomposition of universal function spaces. **80j:08005**
Maurer, I. Gy. Observations concernant les Ω-groupes distributifs et cycliques. **80a:08006**
Rizzi, Bruno *See* **Eugeni, Franco, 80e:08006**

Secondary classifications:

Adámek, Jiří (*with* Sturm, Teo) On congruence lattices in a category. (Russian summary) **(80j:18014)**
Dô Long Vân (*with* Nguen Kuok Toan) Quasimodules. I. (Russian. English and Hungarian summaries) **(80g:16045a)**
(*with* Nguen Kuok Toan) Quasimodules. II. (Russian. Hungarian and English summaries) **(80g:16045b)**
Goršков, P. V. Identities of regular functions over the algebra of data structures. (Russian. English summary) **(80i:68014)**
Grinbergs, A. (*with* Krop, L. E.) Homogeneous verbal ideals. (Russian) **(80g:20039)**
Groze, Victoria *See* **Vasiu, Angela; et al., (80a:20085)**
Holland, W. Charles Varieties of l-groups are torsion classes. **(80b:06017)**
Kóczy, László T. Interactive σ-algebras and fuzzy objects of type N. **(80d:03057)**
Krop, L. E. *See* **Grinbergs, A., (80g:20039)**
Liepa, Peter E. (*with* Wonham, W. M.) Feedback systems in a general algebraic setting. **(80a:93009)**
Mosmer, Zenon Sur l'inégalité de translation. **(80j:20074)**
Nguen Kuok Toan *See* **Dô Long Vân, (80g:16045a)** *and* **Dô Long Vân, (80g:16045b)**
Orbán, B. *See* **Vasiu, Angela; et al., (80a:20085)**
Sturm, Teo *See* **Adámek, Jiří, (80j:18014)**
Taylor, Walter Primal topological algebras. **(80e:22004)**
Vasiu, Angela (*with* Groze, Victoria; Orbán, B.) Characterisation of the S-groups. **(80a:20085)**
Wonham, W. M. *See* **Liepa, Peter E., (80a:93009)**

08Bxx Varieties

Secondary classifications:

Clark, David M. *See* **Krauss, Peter H., (80b:08001)**
Krauss, Peter H. (*with* Clark, David M.) Global subdirect products. **(80b:08001)**
Woźniakowska, Barbara The representation theorem for the algebras determined by the fragments of infinite-valued logic of Łukasiewicz. **(80b:03108)**

08B05 Equational logic, Mal'cev conditions

Burris, Stanley (*with* Lawrence, John) Definable principal congruences in varieties of groups and rings. **80c:08004**
Lawrence, John *See* **Burris, Stanley, 80c:08004**
Saade, Marshall A note on some varieties of point algebras. **80d:08009**
Taylor, Walter Subdirectly irreducible algebras in regular permutable varieties. **80h:08010**

Secondary classifications:

Reiterman, Jan Large algebraic theories with small algebras. **(80i:08006)**

08B10 Congruence modularity, congruence distributivity

Baker, Kirby A. Congruence-distributive polynomial reducts of lattices. **80c:08005**
Burris, Stanley On Baker's finite basis theorem for congruence distributive varieties. **80b:08003**
Gumm, H. Peter Algebras in permutable varieties: geometrical properties of affine algebras. **80d:08010**
Hagemann, Joachim (*with* Herrmann, Christian) A concrete ideal multiplication for algebraic systems and its relation to congruence distributivity. **80j:08006**
Herrmann, Christian Affine algebras in congruence modular varieties. **80h:08011**
See also **Hagemann, Joachim, 80j:08006**
Huhn, A. P. Congruence varieties associated with reducts of abelian group varieties. **80h:08012**
Kollár, János Congruences and one element subalgebras. **80d:08011**
Pixley, A. F. Characterizations of arithmetical varieties. **80d:08012**

08B15 Lattices of varieties

Davey, Brian A. On the lattice of subvarieties. **80j:08007**
Draškovičová, Hilda Conditions for independence of varieties. (Russian summary) **80f:08004**
Oates-Williams, Sheila (*with* Vaughan-Lee, M. R.) Varieties that make one Cross. **80c:08006**
Pollák, G. On the existence of covers in lattices of varieties. **80f:08005**
Vaughan-Lee, M. R. *See* **Oates-Williams, Sheila, 80c:08006**
Volkov, M. V. Lattices of varieties of algebras. (Russian) **80g:08013**

Secondary classifications:

Aizenštat, A. Ja. On varieties of semigroups having a finite number of subvarieties. **(80k:20057)**

08B20 Free algebras

Comer, Stephen D. The countable chain condition and free algebras. **80f:08006**
Higgs, Denis A universal characterization of $[0, \infty]$. **80a:08007**
Kim, Ann Chi Fibonacci varieties. **80f:08007**
Mendelsohn, N. S. The spectrum of idempotent varieties of algebras with binary operators based on two variable identities. **80f:08008**
Romanowska, Anna On free algebras in some equational classes defined by regular equations. **80h:08013**

Secondary classifications:

Burris, Stanley (*with* Lawrence, John) Definable principal congruences in varieties of groups and rings. **(80c:08004)**
Čekanu, G. P. Distinguished varieties of associative algebras. (Russian) **(80j:16003)**
Lawrence, John *See* **Burris, Stanley, (80c:08004)**
Mendelsohn, N. S. A class of combinatorial quasigroups. **(80b:05018)**
Saade, Marshall A note on some varieties of point algebras. **(80d:08009)**
Smirnov, D. M. The correspondence between regularly definable varieties of unary algebras and semigroups. (Russian) **(80g:08011)**

08B25 Products, amalgamated products

Secondary classifications:

Niță, Ana Ultraproducts of rings which retain factor properties. (Romanian. French summary) **(80i:16048)**

08B30 Injectives, projectives

Davey, Brian A. (*with* Werner, Heinrich) Injectivity and Boolean powers. **80b:08004**
Werner, Heinrich *See* **Davey, Brian A., 80b:08004**

08B99 None of the above, but in this section

Čekanu, G. P. *See* **Rjabuhin, Ju. M., 80k:08003**
Day, Alan Idempotents in the groupoid of all SP classes of lattices. **80a:08008**
Grinbergs, A. Unification of varieties of pairs. (Russian) **80g:08014**
Lender, V. B. Monogenic subgroupoids of a groupoid of prevarieties of lattices. (Russian) **80e:08007**
Pollák, G. A class of hereditarily finitely based varieties of semigroups. **80j:08008a**
On identities which define hereditarily finitely based varieties of semigroups. **80j:08008b**
Rjabuhin, Ju. M. (*with* Čekanu, G. P.) Locally finite algebras. (Russian) **80k:08003**

Secondary classifications:

Gardner, B. J. Extension-closed varieties of rings need not have attainable identities. **(80h:17004)**
Grinbergs, A. 4-stable varieties. (Russian) **(80g:20040)**
Ježek, Jaroslav (*with* Kepka, Tomáš) Varieties of quasigroups determined by short strictly balanced identities. **(80b:20092)**
Kepka, Tomáš *See* **Ježek, Jaroslav, (80b:20092)**
Medvedev, Ju. A. Finite basability of varieties with a two-term identity. (Russian) **(80k:17003)**
Russu, A. F. Varieties generated by a finite commutative Moufang loop. (Russian) **(80j:20077)**
Šehtman, V. B. Reiger-Nishimura ladders. (Russian) **(80a:03075)**
Zamjatin, A. P. Prevarieties of associative rings whose elementary theory is decidable. (Russian) **(80i:16049)**

08Cxx Classes of algebras

08C05 Categories of algebras [See also 18C05.]

Secondary classifications:

Căzănescu, Virgil Emil Catégories d'algèbres universelles. I. **(80g:18006)**
Day, Brian J. Duality in topological algebra. **(80c:18005a)**
Addendum: "Duality in topological algebra" (Bull. Austral. Math. Soc. **18** (1978), no. 3, 475–480). **(80c:18005b)**
Gavalec, Martin (*with* Jakubíková, Danica) The width of the category of mono-unary algebras. (Russian) **(80h:08009)**
Jakubíková, Danica *See* **Gavalec, Martin, (80h:08009)**

08C10 Axiomatic model classes [See also 03Cxx, in particular 03C60.]

Reiterman, Jan Large algebraic theories with small algebras. **80i:08006**
Werner, Heinrich ★Discriminator-algebras. **80f:08009**

Secondary classifications:

Barja Pérez, J. ★Álgebras universales en el cálculo de proposiciones. (Spanish) [Universal algebras in the propositional calculus] **(80b:03032)**
Givant, Steven Universal Horn classes categorical or free in power. **(80c:03032)**
Tulipani, Sauro The Hanf number for classes of algebras whose largest congruence is always finitely generated. **(80e:03033)**

08C15 Quasivarieties

Belkin, V. P. Quasi-identities of finite rings and lattices. (Russian) **80g:08015**
Grätzer, George (*with* Lakser, H.) The lattice of quasivarieties of lattices. **80b:08005**
Lakser, H. *See* **Grätzer, George, 80b:08005**

08C99 None of the above, but in this section

Quackenbush, Robert W. Pseudovarieties of finite algebras isomorphic to bounded distributive lattices. **80i:08007**

Secondary classifications:

van Benthem, J. F. A. K. Canonical modal logics and ultrafilter extensions. **(80i:03028)**

10–XX NUMBER THEORY {Excluding 10Axx and 10Mxx, this classification does not distinguish work in the rational number fields from that in other algebraic number fields.}

10–01 Elementary exposition, textbooks

Dudley, Underwood ★Elementary number theory. **80c:10001**
Gubareni, N. M. *See* **Sin'kov, M. V., 80j:10001**
Heidenreich, Karl *See* **Pracht, Egon, 80e:10002**
Hinčin, A. Ja. ★Три жемчужины теории чисел. (Russian) [Three pearls of number theory] **80k:10001**
Humke, Paul D. (*with* Krajewski, Lawrence L.) A characterization of circles which contain rational points. **80h:10001**
Indlekofer, Karl-Heinz ★Zahlentheorie. **80e:10001**
Krajewski, Lawrence L. *See* **Humke, Paul D., 80h:10001**
Kronecker, Leopold ★Vorlesungen über Zahlentheorie. **80k:10002**
Pracht, Egon (*with* Heidenreich, Karl) ★Elementare Zahlentheorie. **80e:10002**
(Puhov, G. È.) *See* **Sin'kov, M. V.; et al., 80j:10001**
(Rosenlicht, Maxwell) *See* **Weil, André, 80e:10004**
Shanks, Daniel ★Solved and unsolved problems in number theory. **80e:10003**
Sin'kov, M. V. (*with* Gubareni, N. M.) ★Непозиционные представления в многомерных числовых системах. (Russian) [Nonpositional representations in multidimensional number systems] **80j:10001**
Stark, Harold M. ★An introduction to number theory. **80a:10001**
Weil, André ★Number theory for beginners. **80e:10004**

Secondary classifications:

Cassels, J. W. S. ★Rational quadratic forms. **(80m:10019)**
(Mai, Brigitte) *See* **Vorobiev, M. M., (80k:10008)**
(Quabeck, Hartwig) *See* **Vorobiev, M. M., (80k:10008)**
Vorobiev, M. M. ★Die Fibonaccischen Zahlen. **(80k:10008)**

10–02 Advanced exposition (research surveys, monographs, etc.)

Erdős, Paul Problems in number theory and combinatorics. **80e:10005**
(*with* Sárközy, András) Some solved and unsolved problems in combinatorial number theory. **80i:10001**
Some unconventional problems in number theory. **80b:10001**
Some unconventional problems in number theory. **80b:10002**
Ihara, Yasutaka Introduction to the work of Mr. Takuro Shintani, winner of the 6th Japan Mathematical Society Iyanaga Prize. (Japanese) **80k:10003**
Mitrinović, Dragoslav S. (*with* Popadić, Milan S.) ★Inequalities in number theory. **80c:10002**
Popadić, Milan S. *See* **Mitrinović, Dragoslav S., 80c:10002**
Sárközy, András *See* **Erdős, Paul, 80i:10001**

Secondary classifications:

Erdős, Paul Combinatorial problems in geometry and number theory. **(80i:05001)**
(Fernández, V.) *See* **Karacuba, A. A., (80k:10037)**
Hlawka, Edmund ★Theorie der Gleichverteilung. **(80j:10057)**
Karacuba, A. A. ★Fundamentos de la teoría analítica de los números. (Spanish) [Principles of analytic number theory] **(80k:10037)**
(Newman, Donald J.) *See* **Sprindžuk, Vladimir G., (80k:10048)**
Shanks, Daniel ★Solved and unsolved problems in number theory. **(80e:10003)**
(Silverman, Richard A.) *See* **Sprindžuk, Vladimir G., (80k:10048)**
Sprindžuk, Vladimir G. ★Metric theory of Diophantine approximations. **(80k:10048)**

10–03 Historical (must also be assigned at least one classification number from Section 01)

Frei, Günther On the development of the genus of quadratic forms. (French summary) **80f:10001**
Giuli, Christine (*with* Giuli, Robert) A primer on Stern's diatomic sequence. I. History. **80h:10002**
Giuli, Robert *See* **Giuli, Christine, 80h:10002**

Secondary classifications:

(Baclawski, K.) *See* **Kac, Mark, (80i:01016)**
Bag, A. K. The method of integral solution of indeterminate equations of the type: $by = ax \pm c$ in ancient and medieval India. **(80m:01013)**
(Bhāskara II) *See* **Ram Behari; et al., (80m:01016)**
Burkill, J. C. John Edensor Littlewood. **(80h:01027)**
Dieudonné, Jean Carl Friedrich Gauss: a bicentenary. **(80h:01029)**
(Donsker, M. D.) *See* **Kac, Mark, (80i:01016)**
Èl'natanov, B. A. Development of the sieve method from Eratosthenes to Euler. (Russian. Tajiki summary) **(80m:01001)**
(Gauss, Carl Friedrich) *See* **Dieudonné, Jean, (80h:01029)**
Jain, B. S. *See* **Ram Behari, (80m:01016)**
Kac, Mark ★Mark Kac: probability, number theory, and statistical physics. **(80i:01016)**
Lehti, Raimo Gauss's *Disquisitiones arithmeticae*. II. (Finnish) **(80a:01021)**
(Littlewood, John Edensor) *See* **Burkill, J. C., (80h:01027)**
Macdivitt, A. R. G. The most recently discovered prime number. **(80j:10008)**
Mackey, George W. Harmonic analysis as the exploitation of symmetry—a historical survey. **(80j:01019)**
Ram Behari (*with* Jain, B. S.) Some mathematical contributions of ancient Indian mathematicians as given in the works of Bhāskarācārya II (12th cent. A.D.). **(80m:01016)**
(Stieltjes, Thomas Jan) *See* **van Veen, S. C., (80f:01022)**
van Veen, S. C. Thomas Jan Stieltjes (1856–1894). **(80f:01022)**
Weil, André ★Oeuvres scientifiques. Collected papers. Vol. I (1926–1951). **(80k:01067a)**
Anniversary:
Birth of Carl Friedrich Gauss *See* **Dieudonné, Jean, (80h:01029)**
Bibliography:
Kac, Mark *See* **Kac, Mark, (80i:01016)**
Littlewood, John Edensor *See* **Burkill, J. C., (80h:01027)**
Weil, André *See* **Weil, André, (80k:01067a)**
Biography:
Stieltjes, Thomas Jan *See* **van Veen, S. C., (80f:01022)**
Obituary:
Littlewood, John Edensor *See* **Burkill, J. C., (80h:01027)**

10–04 Explicit machine computation and programs (not the theory of computation or programming)

Bays, Carter (*with* Hudson, Richard H.) Numerical and graphical description of all axis crossing regions for the moduli 4 and 8 which occur before 10^{12}. **80h:10003**
Devitt, John S. (*with* Guy, Richard K.; Selfridge, J. L.) Third report on aliquot sequences. **80d:10001**
Guy, Richard K. *See* **Devitt, John S.; et al., 80d:10001**
Hudson, Richard H. *See* **Bays, Carter, 80h:10003**
Selfridge, J. L. *See* **Devitt, John S.; et al., 80d:10001**
Shortt, Joseph An iterative program to calculate Fibonacci numbers in $O(\log n)$ arithmetic operations. **80b:10003**
Tanaka, Minoru Experiments concerning the distribution of squarefree numbers. **80g:10001**
Williams, H. C. Primality testing on a computer. **80d:10002**
Yorinaga, Masataka Numerical investigation of sums of the Möbius function. **80i:10002**
Numerical computation of Carmichael numbers. II. **80j:10002**

Secondary classifications:

van Ijzeren, J. Adventure with $x^x = a$ and $y^x = z^y$. (Dutch) **(80m:10015)**
Templer, Mark On the primality of $k!+1$ and $2 \cdot 3 \cdot 5 \cdot \cdots \cdot p+1$. **(80j:10010)**
Williams, H. C. Some properties of a special set of recurring sequences. **(80h:10011)**
Yorinaga, Masataka Numerical computation of Carmichael numbers. **(80d:10026)**
Zwillinger, Dan A Goldbach conjecture using twin primes. **(80b:10071)**

10–06 Proceedings, conferences, etc.

(Borel, Armand) *See* **Automorphic forms, representations and *L*-functions, 80g:10002a** *and* **Automorphic forms, representations and *L*-functions, 80g:10002b**
(Casselman, W.) *See* **Automorphic forms, representations and *L*-functions, 80g:10002a** *and* **Automorphic forms, representations and *L*-functions, 80g:10002b**
(Delange, Hubert) *See* **Séminaire: Delange-Pisot-Poitou, 80a:10002a; Séminaire: Delange-Pisot-Poitou, 80a:10002b; Séminaire: Delange-Pisot-Poitou, 80i:10003a** *and* **Séminaire: Delange-Pisot-Poitou, 80i:10003b**
(Malyšev, A. V.) *See* **Studies in number theory (LOMI), 80d:10003**
(Pisot, Charles) *See* **Séminaire: Delange-Pisot-Poitou, 80a:10002a; Séminaire: Delange-Pisot-Poitou, 80a:10002b; Séminaire: Delange-Pisot-Poitou, 80i:10003a** *and* **Séminaire: Delange-Pisot-Poitou, 80i:10003b**
(Poitou, Georges) *See* **Séminaire: Delange-Pisot-Poitou, 80a:10002a; Séminaire: Delange-Pisot-Poitou, 80a:10002b; Séminaire: Delange-Pisot-Poitou, 80i:10003a** *and* **Séminaire: Delange-Pisot-Poitou, 80i:10003b**
Astérisque *See* **Journées: Arithmétiques de Luminy, 80j:10003**
Automorphic forms, representations and *L*-functions ★Automorphic forms, representations and *L*-functions. Part 1. **80g:10002a**
★Automorphic forms, representations, and *L*-functions. Part 2. **80g:10002b**
Colloque:
CNRS, Journées Arithmétiques de Luminy *See* **Journées: Arithmétiques de Luminy, 80j:10003**
Corvallis, Ore. *See* **Automorphic forms, representations and *L*-functions, 80g:10002a** *and* **Automorphic forms, representations and *L*-functions, 80g:10002b**
Diophantine problems ★Diophantine problems. (Japanese) **80e:10006**
Journées:
Arithmétiques de Luminy ★Journées Arithmétiques de Luminy. **80j:10003**
Kyoto *See* **Diophantine problems, 80e:10006**
***L*-functions** *See* **Automorphic forms, representations and *L*-functions, 80g:10002a** *and* **Automorphic forms, representations and *L*-functions, 80g:10002b**
Luminy *See* **Journées: Arithmétiques de Luminy, 80j:10003**
Number theory *See* **Séminaire: Delange-Pisot-Poitou, 80a:10002a; Séminaire: Delange-Pisot-Poitou, 80a:10002b; Studies in number theory (LOMI), 80d:10003; Séminaire: Théorie des Nombres, 80h:10004; Séminaire: Delange-Pisot-Poitou, 80i:10003a** *and* **Séminaire: Delange-Pisot-Poitou, 80i:10003b**
Paris *See* **Séminaire: Delange-Pisot-Poitou, 80i:10003a** *and* **Séminaire: Delange-Pisot-Poitou, 80i:10003b**
Proceedings of Symposia in Pure Mathematics *See* **Automorphic forms, representations and *L*-functions, 80g:10002a** *and* **Automorphic forms, representations and *L*-functions, 80g:10002b**
Séminaire:
Delange-Pisot-Poitou ★Séminaire Delange-Pisot-Poitou. 18e année: 1976/1977. Théorie des nombres. Fascicule 1: Exposés 1 à 16. **80i:10003a**
★Séminaire Delange-Pisot-Poitou. 18e année: 1976/77. Théorie des nombres. Fascicule 2: Exposés 17 à 29 et Groupe d'étude. **80i:10003b**
★Séminaire Delange-Pisot-Poitou, 19e année: 1977/78. Théorie des nombres. Fascicule 1: Exposés 1 à 22. **80a:10002a**
★Séminaire Delange-Pisot-Poitou, 19e année: 1977/78. Théorie des nombres. Fascicule 2: Exposés 23 à 45. **80a:10002b**
Théorie des Nombres ★Séminaire de Théorie des Nombres 1977–1978. **80h:10004**
Studies in number theory (LOMI) ★Исследования по теории чисел. 5. (Russian) [Studies in number theory. 5] **80d:10003**
Summer Research Institute:
American Mathematical Society *See* **Automorphic forms, representations and *L*-functions, 80g:10002a** *and* **Automorphic forms, representations and *L*-functions, 80g:10002b**
Symposium:
Diophantine Problems *See* **Diophantine problems, 80e:10006**

Secondary classifications:

(Gamkrelidze, R. V.) *See* **Algebra, Topology, Geometry, (80h:00001)**
Algebra, Topology, Geometry ★Алгебра. Топология. Геометрия. Том 16. (Russian) [Algebra. Topology. Geometry. Vol. 16] **(80h:00001)**
Geometry *See* **Algebra, Topology, Geometry, (80h:00001)**
Itogi Nauki i Tehniki *See* **Algebra, Topology, Geometry, (80h:00001)**
Topology *See* **Algebra, Topology, Geometry, (80h:00001)**

10Axx Elementary number theory {For analogues in number fields, see 12A05.}

Secondary classifications:

Shindô, Kôji Polynomial identities of certain algebras. **(80d:16016)**

10A05 Multiplicative structure of the integers (GCD, etc.)

De Leon, M. J. A simple proof of an old divisibility test. **80f:10002**
Hansen, Rodney T. (*with* Swanson, Leonard G.) Unitary divisors. **80j:10004**
Janák, Jaroslav (*with* Skula, Ladislav) On the integers x_i for which $x_i \mid x_1 \cdots x_{i-1}x_{i+1} \cdots x_n + 1$ holds. (Russian summary) **80e:10007**
Skula, Ladislav On a problem of Znám. (Slovak and Russian summaries) **80i:10004**
See also **Janák, Jaroslav, 80e:10007**
Steiner, Ray P. A theorem on the Syracuse problem. **80g:10003**
Swanson, Leonard G. *See* **Hansen, Rodney T., 80j:10004**

Secondary classifications:

Erdős, Paul *See* **Trotter, William T., Jr., (80e:05063)**
Hansen, Rodney T. *See* **Swanson, Leonard G., (80h:20040)**
Swanson, Leonard G. (*with* Hansen, Rodney T.) Number-theoretic characterization of the subgroups and factor groups of a finite cyclic group. **(80h:20040)**
Trotter, William T., Jr. (*with* Erdős, Paul) When the Cartesian product of directed cycles is Hamiltonian. **(80e:05063)**

10A10 Congruences, primitive roots

Albis González, Víctor Samuel On a number of solutions of algebraic congruences. (Spanish) **80j:10005**
Brakemeier, Werner Eine Anzahlformel von Zahlen modulo n. (English summary) **80f:10003**
Cavior, Stephan R. Central pairs of primitive roots. **80e:10003**
Ferentinou-Nikolakopoulou, Ioanna Resolution en x de la congruence $x^n + ny^n \equiv 0 \pmod{z^n}$. **80f:10004**
Hansen, Rodney T. Extension of the Euler-Fermat theorem. **80h:10004**
Hunter, J. A. H. Congruent primes of form $(8r+1)$. **80i:10005**
Wagstaff, Samuel S., Jr. Solution of Nathanson's exponential congruence. **80h:10004**

Secondary classifications:

Baron, Gerd (*with* Schinzel, A.) An extension of Wilson's theorem. **(80e:05025)**
Kuipers, L. Einige Bemerkungen zu einer Arbeit von G. J. Rieger. **(80h:10063)**
Schinzel, A. *See* **Baron, Gerd, (80e:05025)**

10A15 Power residues, reciprocity

Bernardi, Dominique Résidus de puissances. **80h:10005**
★Résidus de puissances. **80i:10006**
Chowla, P. (*with* Chowla, S.) On kth power residues. **80a:10003**
Chowla, S. *See* **Chowla, P., 80a:10003**
von Lienen, Horst Reelle kubische und biquadratische Legendre-Symbole. **80d:10004**
Morton, Patrick A generalization of Zolotarev's theorem. **80d:10005**

Secondary classifications:

Carlitz, Leonard Some theorems on generalized Dedekind-Rademacher sums. **(80f:10005)**
Delsarte, Philippe A generalization of the Legendre symbol for finite abelian groups. **(80f:20024)**
Nakagoshi, Norikata The structure of the multiplicative group of residue classes modulo p^{N+1}. **(80c:12010)**
Watabe, Mutsuo An arithmetical application of elliptic functions to the theory of biquadratic residues. **(80k:12018)**

10A20 Number-theoretic functions, related numbers; inversion formulas

Carlitz, Leonard Specialized Möbius inversion. **80c:10004**
Some theorems on generalized Dedekind-Rademacher sums. **80f:10005**
Chidambaraswamy, J. Totients and unitary totients with respect to a set of polynomials. **80d:10006**
Ewell, John A. Recursive determination of the sum-of-divisors function. **80c:10005**
Grosjean, C. C. Disproving a conjecture about an asymptotic formula of Ramanujan involving the divisor sums. **80i:10007**
Guerin, E. E. Matrices and convolutions of arithmetic functions. **80m:10001**
A convolution related to Golomb's root function. **80h:10006**
Gupta, Hansraj (*with* Singh, Kuldip) The largest r for which $(n+k)!/n!(k+r)!$ is an integer. **80m:10002**
Hausman, Miriam (*with* Shapiro, Harold N.) Adding totitives. **80i:10008**
Heppner, E. Eine Bemerkung zum Hasse-Syracuse-Algorithmus. **80d:10007**
Hsu, Sung May The k-th roots of zero (mod n). **80g:10004**
Kátai, Imre On additive functions. **80b:10005**
Kocay, W. L. *See* **Stanton, Ralph G., 80f:10006**
Kopetzky, H. G. (*with* Schwarz, W.) Two conjectures of B. R. Santos concerning totitives. **80i:10009**
Negoescu, N. C. Sur les théorèmes d'inversion de Möbius et Shapiro. (Romanian summary) **80a:10004**
Nicolas, Jean-Louis Répartitions des nombres largement composés. (English summary) **80j:10006a**
Répartition des nombres largement composés. **80j:10006b**
Odlyzko, Andrew M. (*with* Stanley, Richard P.) Enumeration of power sums modulo a prime. **80c:10006**
Pathó, Péter (*with* Polyák, György) A note on a paper of Y. Matsouka. **80j:10007**
Polyák, György *See* **Pathó, Péter, 80j:10007**
Rehman, Fazal On Euler's φ-function. **80g:10005**
Schwarz, W. *See* **Kopetzky, H. G., 80i:10009**
Shapiro, Harold N. *See* **Hausman, Miriam, 80i:10008**
Singh, Kuldip *See* **Gupta, Hansraj, 80m:10002**
Sita Ramaiah, V. Arithmetical sums in regular convolutions. **80g:10006**
Sivaramakrishnan, R. Square-reduced residue systems (mod r) and related arithmetical functions. **80h:10007**
Snow, Donald R. Formulas for sums of powers of integers by functional equations. **80a:10005**

Somayajulu, B. S. K. R. The sequence $\sigma(n)/\varphi(n)$. **80d:10008**
Stanley, Richard P. *See* **Odlyzko, Andrew M., 80c:10006**
Stanton, Ralph G. (*with* Kocay, W. L.) Computational bounds for a combinatorial sum. **80f:10006**
Stark, E. L. Another way to sum $\sum(1/k^2)$. **80b:10006**
Subrahmanyam, P. On sums involving the integer part of x. **80d:10009**
Suryanarayana, D. Quasiperfect numbers. II. **80m:10003**
On the functional equation $S(m,n)F[n/(m,n)] = F(n)h[n/(m,n)]$. **80g:10007**
Uziemblo, A. O. (*with* Żurawska, L.) Definability of functions on a finite set by means of compositions of addition and multiplication modulo some prime numbers. **80i:10010**
Wooldridge, Kent Values taken many times by Euler's phi-function. **80g:10008**
Żurawska, L. *See* **Uziemblo, A. O., 80i:10010**

Secondary classifications:

Collatz, Lothar Verzweigungsdiagramme und Hypergraphen. **(80d:58016)**
Diamond, Harold G. (*with* Erdős, Paul) A measure of the nonmonotonicity of the Euler phi function. **(80e:10035)**
Erdős, Paul Set-theoretic, measure-theoretic, combinatorial, and number-theoretic problems concerning point sets in Euclidean space. **(80g:04005)**
Some unconventional problems in number theory. **(80b:10001)**
See also **Diamond, Harold G., (80e:10035)**
Garey, Michael R. (*with* Graham, R. L.; Johnson, David S.) On a number-theoretic bin packing conjecture. **(80i:05003)**
Graham, R. L. *See* **Garey, Michael R.; et al., (80i:05003)**
Guaraldo, Rosalind On the density of the image sets of certain arithmetic functions. **(80a:10074)**
Johnson, David S. *See* **Garey, Michael R.; et al., (80i:05003)**
Murty, G. Sri Rama Chandra *See* **Sitaramachandra Rao, R., (80g:10061)**
Rutkowski, J. An application of Dirichlet convolution in proving some inequalities from elementary number theory. **(80f:10007)**
Sitaramachandra Rao, R. (*with* Murty, G. Sri Rama Chandra) On a theorem of Niven. **(80g:10061)**
Yorinaga, Masataka Numerical investigation of sums of the Möbius function. **(80i:10002)**

10A21 Counting functions

Andrews, George E. A note on partitions and triangles with integer sides. **80g:10009**
Erdős, Paul (*with* Sárközy, András) On products of integers. II. **80a:10006**
Sárközy, András *See* **Erdős, Paul, 80a:10006**

Secondary classifications:

Mays, Michael E. Counting abelian, nilpotent, solvable, and supersolvable group orders. **(80g:20088)**

10A22 Abstract theory of number-theoretic functions

Halter-Koch, Franz Eindeutigkeitsmengen für zahlentheoretische Funktionen. **80i:10011**
Krishnaiah, P. V. (*with* Sitaramachandra Rao, R.) On Berndt's method in arithmetical functions and contour integration. **80h:10008**
Rutkowski, J. An application of Dirichlet convolution in proving some inequalities from elementary number theory. **80f:10007**
Schwarz, Wolfgang Periodic, multiplicative number-theoretical functions. **80e:10008**
Sitaramachandra Rao, R. *See* **Krishnaiah, P. V., 80h:10008**
Sivaramakrishnan, R. Multiplicative even functions (mod r). I. Structural properties. **80i:10012a**
Multiplicative even functions (mod r). II. Identities involving Ramanujan sums. **80i:10012b**

Secondary classifications:

Bero, Peter On sets of values of some arithmetical functions. (Slovak and Russian summaries) **(80j:10063)**
Kátai, Imre Divisibility properties of arithmetical functions. **(80i:10079)**
Warlimont, Richard Eine Bemerkung über quadratfreie Zahlen $\equiv 1 \pmod k$. (English summary) **(80d:10070)**

10A25 Elementary prime number theory, factorization

Andrica, Dorin On the sequences $(p_{n+1}-p_n)$, $n>1$. (Romanian) **80a:10007**
Baillie, Robert New primes of the form $k\cdot 2^n+1$. **80h:10009**
Chowdhury, M. R. Über die Fundamentaleigenschaft der Primzahlen. **80i:10013**
Cohen, G. L. On odd perfect numbers. **80g:10010**
Ecklund, E. F., Jr. (*with* Eggleton, R. B.; Erdős, Paul; Selfridge, J. L.) On the prime factorization of binomial coefficients. **80e:10009**
Eggleton, R. B. *See* **Ecklund, E. F., Jr.; et al., 80e:10009**
Erdős, Paul (*with* Szekeres, George) Some number theoretic problems on binomial coefficients. **80e:10010**
See also **Ecklund, E. F., Jr.; et al., 80e:10009**
Francis, Richard L. Isolated primes. **80g:10011**
Gadia, Shashi K. *See* **Gandhi, J. M., 80h:10010**
Gandhi, J. M. (*with* Gadia, Shashi K.) A simple proof of the infinity of irregular primes. **80h:10010**
Garten, Scott Corrections to: "Irregular integers" (Amer. Math. Monthly **85** (1978), no. 3, 165–172) by M. Schreiber. **80c:10007**
Golomb, Solomon W. Cyclotomic polynomials and factorization theorems. **80e:10011**
Gries, David (*with* Misra, Jayadev) A linear sieve algorithm for finding prime numbers. **80d:10010**
Hansen, Rodney T. Fermat's theorem as a corollary to the multinomial theorem. **80i:10014**
Lenstra, H. W., Jr. Miller's primality test. **80c:10008**
Licois, Dorian Sur le nombre H_{15}. (English summary) **80a:10008**
Linkovskiĭ, Ž. B. On the inequality $p_{n+1}<2p_n$ between prime numbers. (Italian. English summary) **80d:10011**
Macilvitt, A. R. G. The most recently discovered prime number. **80j:10008**
Misra, Jayadev *See* **Gries, David, 80d:10010**
Mohanty, S. P. The number of primes is infinite. **80c:10009**
Ondrejka, Rudolf More on large primes. **80g:10012**
Plaisted, David A. Fast verification, testing, and generation of large primes. **80d:10012**
Pomerance, Carl The prime number graph. **80d:10013**
(Schreiber, Morris) *See* **Garten, Scott, 80c:10007**
Seah, E. *See* **Williams, H. C., 80g:10014**
Selfridge, J. L. *See* **Ecklund, E. F., Jr.; et al., 80e:10009**
Slowinski, David Searching for the 27th Mersenne prime. **80g:10013**
Steiner, Ray P. On Cullen numbers. **80j:10009**
Szekeres, George *See* **Erdős, Paul, 80e:10010**
Templer, Mark On the primality of $k!+1$ and $2\cdot 3\cdot 5\cdot \cdots \cdot p+1$. **80j:10010**
Turk, Jan Sets of integers composed of few prime numbers. **80b:10007**
Williams, H. C. Some properties of a special set of recurring sequences. **80h:10011**
(*with* Seah, E.) Some primes of the form $(a^n-1)/(a-1)$. **80g:10014**
Yates, Samuel The mystique of repunits. **80f:10008**

Secondary classifications:

Erdős, Paul Some unconventional problems in number theory. **(80b:10002)**
Li, Shuo-Yen Robert Extremal theorems on divisors of a number. **(80f:05007)**
Singh, Sahib Bound for the solutions of a Diophantine equation in prime Galois fields. **(80m:10010)**
Williams, H. C. Primality testing on a computer. **(80d:10002)**

10A30 Algorithms and expansions; digital properties {For metric results, see 10K10.}

Boas, Ralph P. Generalizations of the 64/16 problem. **80j:10011**
de Bruin, M. G. The interruption phenomenon for generalized continued fractions. **80e:10012**
Culpin, D. (*with* Griffiths, D.) Egyptian fractions. **80d:10014**
Davison, J. L. An algorithm for the continued fraction of $e^{1/m}$. **80j:10012**
Erdős, Paul A property of 70. **80a:10009**
Griffiths, D. *See* **Culpin, D., 80d:10014**
Harborth, Heiko b-adic numbers in Pascal's triangle modulo b. **80c:10010**
Hong, Se June (*with* Ostapko, Daniel L.) Ratios of sequential digit numbers. **80i:10015**
Johannessen, Dag Magne On unit fractions. II. (Norwegian. English summary) **80a:10010**
Klostergaard, Henry Tabulating all Pythagorean triples. **80a:10011**
Kumar, Hemant *See* **Mohanty, S. P., 80j:10013**
Labelle, Gilbert Sur la décomposition des opérations en bits et en pits. **80b:10008**
Mehta, M. L. On f-representation of real numbers. **80k:10005**
Mohanty, S. P. (*with* Kumar, Hemant) Powers of sums of digits. **80j:10013**
Odlyzko, Andrew M. Nonnegative digit sets in positional number systems. **80m:10004**
Ostapko, Daniel L. *See* **Hong, Se June, 80i:10015**
Prichett, Gordon D. Terminating cycles for iterated difference values of five digit integers. **80c:10011**
Rehman, Fazal Notes on generating sets of integers. **80h:10012**
Selmer, Ernst S. Unit fraction expansions and a multiplicative analogue. (Norwegian. English summary) **80c:10012**
Straus, E. G. (*with* Subbarao, M. V.) On the representation of fractions as sum and difference of three simple fractions. **80j:10014**
Subbarao, M. V. *See* **Straus, E. G., 80j:10014**
Tan, H. M. Patterns in square numbers. **80g:10015**
Ugrin-Šparac, D. Preperiod and period of periodic p-adic numbers. (Serbo-Croatian summary) **80h:10013**
Zerger, Monte The magic of pi. **80e:10013**

Secondary classifications:

Bernstein, Leon An algorithm for Halter-Koch units. **(80c:12007)**
Bicknell-Johnson, Marjorie *See* **Hoggatt, Verner E., Jr., (80m:10005)**
Ferguson, H. R. P. (*with* Forcade, R. W.) Generalization of the Euclidean algorithm for real numbers to all dimensions higher than two. **(80i:10039)**
Forcade, R. W. *See* **Ferguson, H. R. P., (80i:10039)**
Fraenkel, A. S. (*with* Mushkin, M.; Tassa, U.) Determination of $[n\theta]$ by its sequence of differences. **(80d:10051)**
Hehner, E. C. R. (*with* Horspool, R. N. S.) A new representation of the rational numbers for fast easy arithmetic. **(80h:68027)**
Hoggatt, Verner E., Jr. (*with* Bicknell-Johnson, Marjorie) Representations of integers in terms of greatest integer functions and the golden section ratio. **(80m:10005)**
Horspool, R. N. S. *See* **Hehner, E. C. R., (80h:68027)**
Matula, David W. Basic digit sets for radix representation of the integers. **(80g:68007)**
Mushkin, M. *See* **Fraenkel, A. S.; et al., (80d:10051)**
Podsypanin, E. V. The length of the period of a quadratic irrationality. (Russian) **(80h:12002)**
Tassa, U. *See* **Fraenkel, A. S.; et al., (80d:10051)**
Yates, Samuel The mystique of repunits. **(80f:10008)**

10A32 Continued fractions {For approximation results, see 10F20; see also 30B70, 40A15.}

de Bruin, M. G. An algorithm for calculating generalized continued fractions. **80b:10010**

Carter, Antonio Special expansions in a periodic infinite continued fraction of the square root of an arbitrary number that is not a perfect square. (Italian) **80b:10011**
Cusick, T. W. Integer multiples of periodic continued fractions. **80b:10009**
Hinčin, A. Ja. ★Цепные дроби. (Russian) [Continued fractions] **80d:10015**
Shallit, Jeffrey Simple continued fractions for some irrational numbers. **80k:10006**
Worley, R. T. Denominator sequences for continued fractions. III. **80a:10012**

Secondary classifications:

Hautot, André (*with* Ploumhans, M. T.) Perspectives actuelles d'applications de la théorie des recurrences linéaires d'ordre *n*. (English summary) **80i:10017**
Ploumhans, M. T. *See* **Hautot, André,** (**80i:10017**)
Rieger, G. J. Ein Gauss-Kusmin-Lévy-Satz für die singulären Kettenbrüche im Sinn von Hurwitz. **(80b:10060)**
Takács, Lajos On generalized Dedekind sums. **(80j:10019)**
Wada, Hideo A note on the Pell equation. **(80k:10011)**

10A35 Recurrence sequences

Agrawal, M. D. On a generalized Fibonacci sequence. (Hindi. English summary) **80i:10016**
Allard, André (*with* Lecomte, Pierre-Claude) Periods and entry points in Fibonacci sequence. **80e:10014**
Bergum, Gerald E. (*with* Hoggatt, Verner E., Jr.) A family of tridiagonal matrices. **80a:10013**
(*with* Hoggatt, Verner E., Jr.) Infinite series with Fibonacci and Lucas polynomials. **80e:10015**
Bicknell-Johnson, Marjorie *See* **Hoggatt, Verner E., Jr., 80c:10015**; **Hoggatt, Verner E., Jr., 80h:10014** *and* **Hoggatt, Verner E., Jr., 80m:10005**
Brown, J. L., Jr. Simplified proof of a greatest integer function theorem. **80a:10014**
Bruckman, Paul S. Some divisibility properties of generalized Fibonacci sequences. **80d:10016**
Bui Minh Phong *See* **Kiss, Péter, 80h:10015**
Carlitz, Leonard Some classes of Fibonacci sums. **80a:10015**
Some polynomials related to Fibonacci and Eulerian numbers. **80c:10013**
Cot, Norbert t-ary trees and generalized Fibonacci numbers. **80d:10017**
Dubouć, Marcel Une suite récurrente remarquable. **80a:10016**
Ercolano, Joseph Matrix generators of Pell sequences. **80b:10012**
Eswarathasan, A. On square pseudo-Lucas numbers. **80a:10017**
On square pseudo-Fibonacci numbers. **80a:10018**
Fuller, Leonard E. Vectors whose elements belong to a generalized Fibonacci sequence. **80c:10014**
Gerdes, Walter Generalized tribonacci numbers and their convergent sequences. **80a:10019**
Gladwin, A. S. Expansion of the Fibonacci number F_{nm} in nth powers of Fibonacci or Lucas numbers. **80a:10020**
Gupta, Hansraj The Andrews formula for Fibonacci numbers. **80a:10021**
Hautot, André (*with* Ploumhans, M. T.) Perspectives actuelles d'applications de la théorie des recurrences linéaires d'ordre *n*. (English summary) **80i:10017**
Hoggatt, Verner E., Jr. (*with* Bicknell-Johnson, Marjorie) Divisibility properties of polynomials in Pascal's triangle. **80c:10015**
(*with* Bicknell-Johnson, Marjorie) Reflections across two and three glass plates. **80h:10014**
(*with* Bicknell-Johnson, Marjorie) Representations of integers in terms of greatest integer functions and the golden section ratio. **80m:10005**
See also **Bergum, Gerald E., 80a:10013** *and* **Bergum, Gerald E., 80e:10015**
Horadam, A. F. Wythoff pairs. **80c:10016**
Sums of products: an extension. **80k:10007**
Kapur, J. N. Derived Fibonacci sequences. **80d:10018**
Kimberling, Clark Strong divisibility sequences and some conjectures. **80f:10009**
Kiss, Péter (*with* Bui Minh Phong) On a function concerning second-order recurrences. **80h:10015**
Zero terms in second-order linear recurrences. **80j:10015**
Krishna, H. V. A note on number forms in the Q sequence. **80c:10017**
Lecomte, Pierre-Claude *See* **Allard, André, 80e:10014**
(Mai, Brigitte) *See* **Vorobiev, M. M., 80k:10008**
Mignotte, Maurice Some effective results about linear recursive sequences. **80d:10019**
Une extension du théorème de Skolem-Mahler. (English summary) **80b:10013**
Neumann, B. H. (*with* Wilson, L. O.) Some sequences like Fibonacci's. **80b:10014**
O'Donnell, William J. Two theorems concerning hexagonal numbers. **80d:10020**
O'Reilly, Thomas J. Extended Fibonacci series and binary golden numbers. **80e:10016**
Picon, P. A. Sur certaines suites récurrentes cubiques ayant deux ou trois termes nuls. **80f:10010**
Ploumhans, M. T. *See* **Hautot, André, 80i:10017**
(Quabeck, Hartwig) *See* **Vorobiev, M. M., 80k:10008**
Robba, Philippe Zéros de suites récurrentes linéaires. **80b:10015**
Somer, Lawrence Which second-order linear integral recurrences have almost all primes as divisors? **80d:10021**
Steiner, Ray P. On nth powers in the Lucas and Fibonacci series. **80h:10016**
Székely, Gábor (*with* Tusnády, Gábor) Generalized Fibonacci numbers and the number of "pure heads". (Hungarian. English summary) **80j:10016**
Tusnády, Gábor *See* **Székely, Gábor, 80j:10016**
Vince, Andrew The Fibonacci sequence modulo N. **80a:10022**
Vorobiev, M. M. ★Die Fibonaccischen Zahlen. **80k:10008**
Waddill, Marcellus E. Some properties of a generalized Fibonacci sequence modulo m. **80b:10016**
Wall, Charles R. Some congruences involving generalized Fibonacci numbers. **80d:10022**
Wilson, L. O. *See* **Neumann, B. H., 80b:10014**
Zeckendorf, E. Points d'entrée dans une suite récurrente de facteurs p premiers impairs successifs. (English summary) **80d:10023**

Secondary classifications:

Adler, Irving The consequences of contact pressure in phyllotaxis. **(80k:92001)**
Bicknell-Johnson, Marjorie *See* **Hoggatt, Verner E., Jr., (80c:05023)**
Britton, J. L. On the conjugacy problem and difference equations. **(80k:20039)**
Dressler, Robert E. (*with* Pigno, Louis) Interpolation of Fourier transforms on sums of Fibonacci numbers. **(80a:43009)**
Ferguson, Helaman Rolfe Pratt The Fibonacci pseudogroup, characteristic polynomials and eigenvalues of tridiagonal matrices, periodic linear recurrence systems and application to quantum mechanics. **(80j:15014)**
Hoggatt, Verner E., Jr. (*with* Bicknell-Johnson, Marjorie) Convolution arrays for Jacobsthal and Fibonacci polynomials. **(80e:05023)**
Pigno, Louis *See* **Dressler, Robert E., (80a:43009)**
Ruzsa, I. Z. On the additive completion of linear recurrence sequences. **(80i:10076)**
Stein, P. R. (*with* Waterman, Michael S.) On some new sequences generalizing the Catalan and Motzkin numbers. **(80j:05014)**
Waterman, Michael S. *See* **Stein, P. R., (80j:05014)**

10A40 Special numbers, sequences and polynomials (e.g. Bernoulli)

Ando, Shiro (*with* Hirano, Teruhiko) On the proof of a formula of Wronski. **80b:10017**
Carlitz, Leonard Generalized Stirling and related numbers. **80h:10017**
Charalambides, Ch. A. Bernoulli related polynomials and numbers. **80h:10018**
Chein, E. Z. On a conjecture of Graham concerning a sequence of integers. **80d:10024**
Eswarathasan, A. On pseudo-Lucas numbers of the form $2S^2$. **80g:10016**
On pseudo-Fibonacci numbers of the form $2S^2$, where S is an integer. **80g:10017**
Evans, Ronald J. An asymptotic formula for a sum of products of powers. **80e:10017**
Gandhi, J. M. (*with* Kasube, H.; Suryanarayana, D.) Congruences for Bernoulli numbers modulo p^3. (Italian summary) **80j:10017**
Godwin, H. J. Corrigenda: "A note on congruent numbers" (Math. Comp. 32 (1978), no. 141, 293–295). **80c:10018**
Grattan-Guinness, I. Data on the reduced numbers of Fibonacci numbers. **80d:10025**
Hayasaka, Takanori *See* **Saito, Sadao, 80f:10013**
Herget, W. Minimum periods modulo n for Bernoulli numbers. **80f:10011**
Bernoulli-Polynome in den Restklassenringen Z_n. (Serbo-Croatian and English summaries) **80j:10018**
Hillman, A. P. *See* **Hoggatt, Verner E., Jr., 80a:10023**
Hirano, Teruhiko *See* **Ando, Shiro, 80b:10017**
Hoggatt, Verner E., Jr. (*with* Hillman, A. P.) A property of Wythoff pairs. **80a:10023**
Horadam, A. F. Chebyshev and Fermat polynomials for diagonal functions. **80k:10009**
Hussain, M. A. (*with* Singh, S. N.) On generalized polynomial set $D_n(x; a, k)$. **80b:10018**
Kasube, H. *See* **Gandhi, J. M.; et al., 80j:10017**
Kimberling, Clark Strong divisibility sequences with nonzero initial term. **80g:10018**
Greatest common divisors of sums and differences of Fibonacci, Lucas, and Chebyshev polynomials. **80b:10019**
Kiss, Péter (*with* Várnai, Ferenc) On generalized Pell numbers. **80h:10019**
Kurepa, Dj. A combinatorial interpretation of a sequence of integers. **80f:10012**
Lord, Graham (*with* Morin, Herve G.) Degeneracy of transformed complete sequences. **80m:10006**
Mercer, A. McD. Generalized Beatty sequences. **80i:10018**
Miki, Hiroo A relation between Bernoulli numbers. **80a:10024**
Morin, Herve G. *See* **Lord, Graham, 80m:10006**
Robbins, Neville On Fibonacci numbers which are powers. **80i:10019**
Saito, Sadao (*with* Hayasaka, Takanori) A perfect (sn)-sequence based on the quadratic $F(k, i)$. **80f:10013**
Singh, S. N. *See* **Hussain, M. A., 80b:10018**
Stolarsky, Kenneth B. The binary digits of a power. **80b:10020**
Suryanarayana, D. *See* **Gandhi, J. M.; et al., 80j:10017**
Takács, Lajos On generalized Dedekind sums. **80j:10019**
Várnai, Ferenc *See* **Kiss, Péter, 80h:10019**
Yorinaga, Masataka Numerical computation of Carmichael numbers. **80d:10026**

Secondary classifications:

Burmester, M. (*with* Forcade, R.; Jacobs, E.) Circles of numbers. **(80a:05023)**
Carlitz, Leonard Stirling pairs. **(80m:05010)**
Devitt, John S. (*with* Guy, Richard K.; Selfridge, J. L.) Third report on aliquot sequences. **(80d:10001)**
Eplett, W. J. R. A note about the Catalan triangle. **(80i:05007)**
Ernvall, Reijo (*with* Metsänkylä, Tauno) Cyclotomic invariants and E-irregular primes. **(80c:12004a)**
Generalized Bernoulli numbers, generalized irregular primes, and class number. **(80m:12002)**
Corrigenda: "Cyclotomic invariants and E-irregular primes" (Math. Comp. 32 (1978), no. 142, 617–629) by Ernvall and T. Metsänkylä. **(80c:12004b)**
Evans, Ronald J. (*with* Hill, Jay Roderick) The cyclotomic numbers of order sixteen. **(80b:10053)**
Forcade, R. *See* **Burmester, M.; et al., (80a:05023)**
Giuli, Christine (*with* Giuli, Robert) A primer on Stern's diatomic sequence. I. History. **(80h:10002)**
Giuli, Robert *See* **Giuli, Christine, (80h:10002)**
Guinand, Andrew P. The umbral method: a survey of elementary mnemonic and manipulative uses. **(80e:05001)**
Guy, Richard K. *See* **Devitt, John S.; et al., (80d:10001)**
Hill, Jay Roderick *See* **Evans, Ronald J., (80b:10053)**
Jacobs, E. *See* **Burmester, M.; et al., (80a:05023)**
Langmann, Klaus Eine endliche Formel für die Anzahl der Teiler von n. (English summary) **(80g:10044)**
Lunnon, W. F. (*with* Pleasants, P. A. B.; Stephens, N. M.) Arithmetic properties of Bell numbers to a composite modulus. I. **(80k:05006)**

Metsänkylä, Tauno *See* **Ernvall, Reijo, (80c:12004a)** *and* **Ernvall, Reijo, (80c:12004b)**
Pathó, Péter (*with* Polyák, György) A note on a paper of Y. Matsouka. **(80j:10007)**
Pleasants, P. A. B. *See* **Lunnon, W. F.; et al., (80k:05006)**
Polyák, György *See* **Pathó, Péter, (80j:10007)**
Sands, Arthur D. On generalised Catalan numbers. **(80c:05010)**
Selfridge, J. L. *See* **Devitt, John S.; et al., (80d:10001)**
Sobolev, S. L. More on roots of Euler polynomials. (Russian) **(80f:65052)**
Stein, P. R. (*with* Waterman, Michael S.) On some new sequences generalizing the Catalan and Motzkin numbers. **(80j:05014)**
Steiner, Ray P. On Cullen numbers. **(80j:10009)**
Stephens, N. M. *See* **Lunnon, W. F.; et al., (80k:05006)**
Uehara, Tsuyoshi Fermat's conjecture and Bernoulli numbers. **(80a:12008)**
Waterman, Michael S. *See* **Stein, P. R., (80j:05014)**
Woodcock, C. F. Convolutions on the ring of p-adic integers. **(80k:12027)**
Wyss, Walter Quasimultiplication and polynomial sequences. **(80m:05008)**
Yorinaga, Masataka Numerical computation of Carmichael numbers. II. **(80j:10002)**

10A45 Partitions

Alladi, K. (*with* Erdős, Paul; Hoggatt, Verner E., Jr.) On additive partitions of integers. **(80a:10025)**
Andrews, George E. (*with* Askey, Richard) Enumeration of partitions: the role of Eulerian series and q-orthogonal polynomials. **(80b:10021)**
Partition ideals of order 1, the Rogers-Ramanujan identities and computers. **(80d:10027)**
Partitions and Durfee dissection. **(80h:10020)**
Askey, Richard *See* **Andrews, George E., (80b:10021)**
Beiter, Marion Coefficients of the cyclotomic polynomial $F_{3\cdot 5^n}(x)$. **(80a:10026)**
Bressoud, D. M. On a partition theorem of Göllnitz. **(80a:10027)**
Carlitz, Leonard Restricted compositions. II. **(80i:10020)**
Erdős, Paul (*with* Loxton, J. H.) Some problems in partitio numerorum. **(80h:10021)**
See also **Alladi, K.; et al., (80a:10025)**
Foss, Apparecido Rubens *See* **Madsen Barbosa, Ruy, (80m:10007)**
Gupta, Hansraj (*with* Pleasants, P. A. B.) Partitions into powers of m. **(80f:10014)**
Hindman, Neil Partitions and sums and products of integers. **(80b:10022)**
Hoggatt, Verner E., Jr. *See* **Alladi, K.; et al., (80a:10025)**
Kuriki, Shinji Sur une méthode de calcul du dénumérant. **(80d:10028)**
Loxton, J. H. *See* **Erdős, Paul, (80h:10021)**
Madsen Barbosa, Ruy (*with* Foss, Apparecido Rubens) A note on binary, ternary and quarternary compositions with distinct partitions. (Portuguese. English summary) **(80m:10007)**
Pleasants, P. A. B. *See* **Gupta, Hansraj, (80f:10014)**
de la Rosa, B. Primes, powers, and partitions. **(80a:10028)**

Secondary classifications:

Andrews, George E. (*with* Askey, Richard) A simple proof of Ramanujan's summation of the ${}_1\psi_1$. **(80h:33004)**
An introduction to Ramanujan's "lost" notebook. **(80e:01018)**
A note on partitions and triangles with integer sides. **(80g:10009)**
Plane partitions. III. The weak Macdonald conjecture. **(80j:05009)**
Askey, Richard *See* **Andrews, George E., (80h:33004)**
Carlitz, Leonard Up-down and down-up partitions. **(80d:05005)**
Furstenberg, Harry (*with* Weiss, Benjamin) Topological dynamics and combinatorial number theory. **(80g:05009)**
Gupta, Hansraj The rank-vector of a partition. **(80a:05017)**
Hindman, Neil Simultaneous idempotents in $\beta\mathbf{N}\setminus\mathbf{N}$ and finite sums and products in N. **(80f:05005)**
Hirschhorn, M. D. Some partition theorems of the Rogers-Ramanujan type. **(80j:05010)**
Mercer, A. McD. Generalized Beatty sequences. **(80i:10018)**
(Ramanujan, Srinivasa) *See* **Andrews, George E., (80e:01018)**
Richmond, L. Bruce (*with* Szekeres, George) The Taylor coefficients of certain infinite products. **(80g:10046)**
Schillo, Paul *See* **Straight, H. Joseph, (80f:05059)**
Straight, H. Joseph (*with* Schillo, Paul) On the problem of partitioning $\{1, 2, \cdots, n\}$ into subsets having equal sums. **(80f:05059)**
Szekeres, George *See* **Richmond, L. Bruce, (80g:10046)**
Weiss, Benjamin *See* **Furstenberg, Harry, (80g:05009)**

10A99 None of the above, but in this section

Bohigian, Haig E. Extensions of the W. Mnich problem. **(80e:10018)**
Dimovski, Dončo Additive semigroups of integers. (Macedonian. English summary) **(80m:10008)**
Vojtech, László On some problems in the elementary theory of numbers. (Slovak and Russian summaries) **(80i:10021)**
Wagstaff, Samuel S., Jr. Some questions about arithmetic progressions. **(80j:10020)**

Secondary classifications:

Berstel, Jean Ensembles reconnaissables de nombres. **(80e:68212)**
Erdős, Paul Problems and results in combinatorial analysis and combinatorial number theory. **(80h:05001)**

10Bxx Diophantine equations [See also 14Gxx.]

Secondary classifications:

Gaal, I. L. ★Classical Galois theory, with examples. **(80g:12001)**

10B05 Linear, quadratic and bilinear equations

Anderson, David A. (*with* Loyer, Milton W.) The Diophantine equation $Nb^2 = c^2 + N + 1$. **80d:10029**
Arkin, Joseph (*with* Hoggatt, Verner E., Jr.; Straus, E. G.) On Euler's solution of a problem of Diophantus. **80m:10009**
Ballew, David W. (*with* Weger, Ronald C.) Pythagorean triples and triangular numbers. **80j:10021**
Belkner, Horst Die diophantische Gleichung $\sum_{j=1}^{k} x_j^2 = \sum_{j=1}^{r} x_{k+j}^2$ mit $3 \leqslant k \leqslant 8$, $1 \leqslant r \leqslant 3$. (Russian and English summaries) **80k:10010**
Beukers, Frits ★The generalised Ramanujan-Nagell equation. **80j:10022**
Byrkit, Donald R. Solving linear congruences. **80j:10023**
Dussaud, René (*with* Idée, Edwige) Series entières associées dans la construction de fonctions arithmétiques. **80a:10029**
Ehrhart, Eugène Sur les équations diophantiennes linéaires. (English summary) **80b:10023**
Hoggatt, Verner E., Jr. *See* **Arkin, Joseph; et al., 80m:10009**
Idée, Edwige *See* **Dussaud, René, 80a:10029**
Inkeri, K. On the Diophantine equations $2y^2 = 7^k + 1$ and $x^2 + 11 = 3^n$. **80j:10024**
Loyer, Milton W. *See* **Anderson, David A., 80d:10029**
Straus, E. G. *See* **Arkin, Joseph; et al., 80m:10009**
Wada, Hideo A note on the Pell equation. **80k:10011**
Weger, Ronald C. *See* **Ballew, David W., 80j:10021**

Secondary classifications:

Beck, Jon M. A concentration problem in combinatorial number theory. **(80c:05013)**
Britton, J. L. Integer solutions of systems of quadratic equations. **(80i:10080)**
Hunter, J. A. H. Congruent primes of form $(8r + 1)$. **(80i:10005)**
Kiefer, Jack C. A Diophantine problem in optimum design theory. **(80b:62091)**
Kiss, Péter (*with* Várnai, Ferenc) On generalized Pell numbers. **(80h:10019)**
Morikawa, Ryozo On units of real quadratic number fields. **(80i:12008)**
Stender, Hans-Joachim Zur Parametrisierung reell-quadratischer Zahlkörper. **(80k:12007)**
Über die Grundeinheit der reell-quadratischen Zahlkörper $\mathbf{Q}(\sqrt{(A^2N^2 + BN + C)})$. **(80k:12008)**
Várnai, Ferenc *See* **Kiss, Péter, (80h:10019)**

10B10 Cubic and quartic equations

Baldisserri, Natalia On the number of points of elliptic cubics with complex multiplication, reduced modulo p. (Italian. English summary) **80j:10025**
Bremner, Andrew A Diophantine equation arising from tight 4-designs. **80j:10026**
Cassels, J. W. S. A Diophantine equation over a function field. **80a:10030**
Cohn, J. H. E. The Diophantine equation $y^2 = Dx^4 + 1$. III. **80a:10031**
Craig, Maurice Integer values of $\Sigma(x^2/yz)$. **80f:10015**
Ke, Zhao (*with* Sun, Qi) The Diophantine equation $x^4 - pqy^2 = 1$. (Chinese. English summary) **80k:10012**
Lagrange, Jean Sur le dérivé du cuboïde eulérien. **80h:10022**
Nair, M. A note on the equation $x^3 - y^2 = k$. **80g:10019**
Rosenberger, Gerhard Über die diophantische Gleichung $ax^2 + by^2 + cz^2 = dxyz$. **80d:10030**
Singh, Sahib Bound for the solutions of a Diophantine equation in prime Galois fields. **80m:10010**
Sun, Qi *See* **Ke, Zhao, 80k:10012**

Secondary classifications:

Stroeker, R. J. Aspects of elliptic curves; an introduction. **(80b:14019)**
Vvedens'kiĭ, O. M. Computation of the Selmer group and order of divisibility of the elements in the groups $H^1(K, E; q)$ of an elliptic curve. (Russian. English summary) **(80e:14007)**
Zimmer, Horst G. Quasifunctions on elliptic curves over local fields. **(80g:14024)**

10B15 Higher degree equations

Avanesov, È. T. On the Diophantine equation $p^2x^4 + 5px^2y^2 + y^4 = z^2$. (Russian) **80m:10011**
Bender, Edward A. (*with* Herzberg, Norman P.) Some Diophantine equations related to the quadratic form $ax^2 + by^2$. **80g:10020**
Clarke, J. H. (*with* Shannon, A. G.) Some observations on Fermat's last theorem. **80m:10012**
Cohen, Edward L. Sur une équation diophantienne de Ljunggren. **80a:10032**
Ennola, Veikko J-fields generated by roots of cyclotomic integers. **80f:10016**
Győry, K. *See* **Voorhoeve, M.; et al., 80e:10020**
Herzberg, Norman P. *See* **Bender, Edward A., 80g:10020**
Ismatullaev, Š. A. The number of solutions of a system of Diophantine equations. (Russian) **80d:10031**
Konjagin, S. V. The number of solutions of congruences of the nth degree with one unknown. (Russian) **80k:10013a**
Letter to the editors: "The number of solutions of congruences of the nth degree with one unknown" [Mat. Sb. (N.S.) **109(151)** (1979), no. 2, 171–187, 327; MR 80k:10013a]. (Russian) **80k:10013b**
Kotov, S. V. Die arithmetische Struktur der rationalen Punkte auf Kurven vom Geschlecht Eins. **80m:10013**
(*with* Trelina, L. A.) S-ganze Punkte auf elliptischen Kurven. **80b:10024**
Meres, Lucjan On a certain estimation of solving Fermat's equation. (Polish. Russian and English summaries) **80k:10014**
About certain inequalities connected with the great theorem of Fermat. (Polish. Russian and English summaries) **80k:10015**
Mihailov, I. I. Some remarks on the Diophantine equation $x^{4k} + y^{2k} + z^{2k} = 2t^{2k}$ $(k = 1, 2)$. (Russian) **80h:10023**

Peretti, Aldo Théorie statistique des nombres. I. Nombre de solutions de l'équation diophantienne $x_1^k + x_2^k + \cdots + x_m^k = \mu^k$. **80m:10014a**
Théorie statistique des nombres. II–VII. **80m:10014b**
Powell, Barry Proof of a special case of Fermat's last theorem. **80a:10033**
Setzer, C. Bennett Arithmetic progressions in the values of a quadratic polynomial. **80d:10032**
Shannon, A. G. *See* **Clarke, J. H., 80m:10012**
Shapiro, Harold N. (*with* Sparer, Gerson H.) Correction to: "Power quadratic Diophantine equations and descent" (Comm. Pure Appl. Math. 31(1978), no. 2, 185–203). **80b:10025**
Spackman, Kenneth W. Simultaneous solutions to diagonal equations over finite fields. **80f:10017**
Sparer, Gerson H. *See* **Shapiro, Harold N., 80b:10025**
Steiner, Ray P. On kth-power numerical centers. **80a:10034**
Stroeker, R. J. A class of Diophantine equations connected with certain elliptic curves over $\mathbf{Q}(\sqrt{-13})$. **80e:10019**
Tijdeman, R. *See* **Voorhoeve, M.; et al., 80e:10020**
Tolstikov, A. V. Application of fields generated by Gauss periods to the study of cyclic Diophantine equations. II. (Russian) **80h:10024**
Trelina, L. A. S-integral solutions of Diophantine equations of hyperbolic type. (Russian. English summary) **80b:10025**
See also **Kotov, S. V., 80b:10024**
Udrescu, Valeriu Şt. On the Diophantine equation $27y^2 + 4x^3 = D$. **80d:10033**
Voorhoeve, M. (*with* Győry, K.; Tijdeman, R.) On the Diophantine equation $1^k + 2^k + \cdots + x^k + R(x) = y^z$. **80e:10020**
Vrânceanu, Gheorghe Une interprétation géométrique du théorème de Fermat. **80h:10026**
Yahya, Q. A. M. M. Fermat's last theorem—a topological verification. **80f:10018**

Secondary classifications:

Beukers, Frits ★The generalised Ramanujan-Nagell equation. **(80j:10022)**
Fried, Ervin (*with* Kollár, János) Automorphism groups of algebraic number fields. **(80d:14015)**
Geyer, Wulf-Dieter (*with* Jarden, Moshe) Torsion points of elliptic curves over large algebraic extensions of finitely generated fields. **(80d:14016)**
Gordon, W. J. Linking the conjectures of Artin-Tate and Birch-Swinnerton-Dyer. **(80h:14010)**
Harris, Michael Systematic growth of Mordell-Weil groups of abelian varieties in towers of number fields. **(80l:14015)**
Inkeri, K. On the Diophantine equations $2y^2 = 7^k + 1$ and $x^2 + 11 = 3^n$. **(80j:10024)**
Jarden, Moshe *See* **Geyer, Wulf-Dieter, (80d:14016)**
Kenku, M. A. Certain torsion points on elliptic curves defined over quadratic fields. **(80g:14035)**
Kollár, János *See* **Fried, Ervin, (80d:14015)**
Odoni, R. W. K. A proof by classical methods of a result of Ax on polynomial congruences modulo a prime. **(80f:14011)**
Singh, Sahib Integer points on special hyper-elliptic curves in GF(p). **(80k:14036)**
Uehara, Tsuyoshi Fermat's conjecture and Bernoulli numbers. **(80a:12008)**
Vvedens'kiĭ, O. M. Pairings in elliptic curves over global fields. (Russian) **(80j:14037)**

10B16 Norm form equations

Győry, K. (*with* Papp, Z. Z.) Effective estimates for the integer solutions of norm form and discriminant form equations. **80b:10026**
Papp, Z. Z. *See* **Győry, K., 80b:10026**

10B20 Multiplicative equations

10B25 Nonpolynomial equations

van Ijzeren, J. Adventure with $x^n = a$ and $y^n = z^n$. (Dutch) **80m:10015**
Owings, James C., Jr. Solution of $\binom{y}{x}^{+1} = \binom{y}{x+1}$ in terms of Fibonacci numbers. **80b:10027**

Secondary classifications:

Erdős, Paul Some unconventional problems in number theory. **(80b:10002)**
Straus, E. G. (*with* Subbarao, M. V.) On the representation of fractions as sum and difference of three simple fractions. **(80j:10014)**
Subbarao, M. V. *See* **Straus, E. G., (80j:10014)**

10B30 Equations in sufficiently many variables [See also 10J10.]

Schmidt, Wolfgang M. Small zeros of additive forms in many variables. **80c:10019**

10B35 Representation problems [See also 10J10.]

Malyšev, A. V. (*with* Pačev, U. M.) Representation of integers by positive ternary quadratic forms (a new variant of the discrete ergodic method). (Russian) **80j:10027**
Newman, Donald J. (*with* Slater, Morton) Waring's problem for the ring of polynomials. **80m:10016**
Pačev, U. M. *See* **Malyšev, A. V., 80j:10027**
Slater, Morton *See* **Newman, Donald J., 80m:10016**

Secondary classifications:

Bohman, Jan (*with* Fröberg, Carl-Erik; Riesel, Hans) Partitions in squares. **(80k:10043)**
Bredikhin, B. M. (*with* Grišina, T. I.) Elementary estimation of $G(n)$ in Waring's problem. (Russian) **(80a:10065)**
Fröberg, Carl-Erik *See* **Bohman, Jan; et al., (80k:10043)**
Grišina, T. I. *See* **Bredikhin, B. M., (80a:10065)**
Porubský, Štefan Sums of prime powers. **(80l:10065)**
Riesel, Hans *See* **Bohman, Jan; et al., (80k:10043)**

10B40 p-adic and power series fields

Knesser, Martin Konstruktive Lösung p-adischer Gleichungssysteme. **80h:10027**
Schmidt, Wolfgang M. Thue's equation over function fields. **80c:10020**

Secondary classifications:

Zimmer, Horst G. Quasifunctions on elliptic curves over local fields. **(80g:14024)**

10B45 Diophantine inequalities

Cook, Roger Diophantine inequalities with mixed powers. II. **80d:10034**
Kovalevskaja, È. I. A geometric property of extremal surfaces. (Russian) **80f:10019**
Lau, Kee Wai (*with* Liu, Ming Chit) Approximation by four squares and a k-th power. **80g:10021**
Liu, Ming Chit *See* **Lau, Kee Wai, 80g:10021**

Secondary classifications:

Langmayr, Franz Zur simultanen Diophantischen Approximation. I. (English summary) **(80j:10038a)**
Zur simultanen Diophantischen Approximation. II. (English summary) **(80j:10038b)**

10B99 None of the above, but in this section

Jäger, Joachim (*with* Schupp, Hans) Pseudofermat'sche Tripel. **80c:10028**
Schupp, Hans *See* **Jäger, Joachim, 80h:10028**

Secondary classifications:

Denef, J. (*with* Lipshitz, L.) Diophantine sets over some rings of algebraic integers. **(80a:12030)**
Lipshitz, L. *See* **Denef, J., (80a:12030)**

10Cxx Forms (especially quadratic) {For quadratic forms in linear algebra, see 15A63.}

Secondary classifications:

Frei, Günther On the development of the genus of quadratic forms. (French summary) **(80f:10001)**
Preuss, Dietmar Residuen symmetrischer differentialformenwertiger Bilinearformen. **(80e:14005)**

10C01 Forms over general fields (especially quadratic)

Arason, Jón Kr. Wittring und Galoiscohomologie bei Charakteristik 2. **80f:10020**
Elman, R. (*with* Lam, T. Y.; Wadsworth, Adrian R.) Function fields of Pfister forms. **80m:10017**
Lam, T. Y. *See* **Elman, R.; et al., 80m:10017**
Revoy, Philippe Une note sur les formes quadratiques en caractéristique 2. **80k:10016**
Shapiro, Jack M. A Riemann-Roch type theorem for the Witt and Milnor rings of a field. **80l:10022**
Wadsworth, Adrian R. *See* **Elman, R.; et al., 80m:10017**

Secondary classifications:

Hahn, Alexander J. Unipotent elements and the spinor norms of Wall and Zassenhaus. **(80d:15030)**
Knebusch, Manfred (*with* Kolster, Manfred) ★Wittringe. (English) **(80e:10022)**
Kolster, Manfred *See* **Knebusch, Manfred, (80e:10022)**
Pfister, Albrecht Systems of quadratic forms. **(80j:10033)**
Prestel, Alexander Remarks on the Pythagoras and Hasse number of real fields. **(80d:12020)**
Szczepanik, Lucyna Quadratic forms over Springer fields. **(80l:10023)**

10C02 Forms over global rings and fields (especially quadratic)

Blanco Martín, María Francisca (*with* Tena Ayuso, Juan) The kernel of the homomorphism $W(\mathbf{Q}) \to W(\mathbf{Q}(\sqrt{d}))$. (Spanish) **80e:10021**
Shapiro, Daniel B. Hasse principle for the Hurwitz problem. **80h:10028**
Smith, Richard F. The construction of definite indecomposable Hermitian forms. **80c:10021**
Tena Ayuso, Juan *See* **Blanco Martín, María Francisca, 80e:10021**
Towber, Jacob Tangent bundles to affine quadric surfaces over local and global fields. **80g:10022**

10C03 Forms over local rings and fields (especially quadratic)

Gallagher, Vincent P. Local trace forms. **80g:10023**
Guin, Daniel K-théorie algébrique et invariants des formes quadratiques. **80j:10028**
James, D. G. Unitary geometry over local rings. **80b:10029**
Szczepanik, Lucyna Quadratic forms over Springer fields. **80l:10023**

Secondary classifications:

Anderson, Gerald A. Groups of PL Λ-homology spheres. **(80j:57031)**

Carlsson, G. (*with* Milgram, R. James) Torsion Witt rings for orders and finite groups. **(80b:18012)**
Milgram, R. James *See* **Carlsson, G., (80b:18012)**
Morin-Strom, Karl A. A Witt theorem for non-defective lattices. **(80a:13029)**
Shapiro, Daniel B. Hasse principle for the Hurwitz problem. **(80b:10028)**
Shyr, Jih Min Class numbers of binary quadratic forms over algebraic number fields. **(80g:12013)**

10C04 Forms over real fields

Bäni, Werner Subspaces of positive definite inner product spaces of countable dimension. **80i:10024**
Craven, Thomas C. Characterizing reduced Witt rings. II. **80i:10025**
Marshall, Murray A. Quotients and inverse limits of spaces of orderings. **80f:10021**
Classification of finite spaces of orderings. **80i:10026**
Mettenborg, Marlies Beantwortung einer Frage von J. Arason und A. Pfister als Korollar eines Ergebnisses von L. Bröcker. **80j:10029**

Secondary classifications:

Golubeva, E. P. The asymptotic behavior of the number of representations of large numbers by certain ternary positive quadratic forms. (Russian) **(80d:10066)**
Pfeuffer, Horst On a conjecture about class numbers of totally positive quadratic forms in totally real algebraic number fields. (German summary) **(80h:10030)**
Turisco, JoAnn Quadratic mappings of spheres. **(80e:55030)**

10C05 Quadratic, bilinear and Hermitian forms [See also 10E25.], general theory (including Witt rings of quadratic forms)

Baeza, Ricardo On the classification of quadratic forms over semilocal rings. **80m:10018**
Bak, Anthony Arf's theorem for trace Noetherian and other rings. **80j:10030**
Cassels, J. W. S. ★Rational quadratic forms. **80m:10019**
Chalk, J. H. H. Zeros of quadratic forms. **80k:10017**
Garbanati, Dennis A. An algorithm for the representation of zero by a quadratic form. **80f:10022**
Ishibashi, Hiroyuki Generators of an orthogonal group over a local valuation domain. **80f:10023**
Ivanov, O. A. A construction for integral symmetric bilinear forms. (Russian. English summary) **80i:10027**
Knebusch, Manfred (*with* Kolster, Manfred) ★Wittringe. (English) **80e:10022**
Kolster, Manfred *See* **Knebusch, Manfred, 80e:10022**
Kula, Mieczysław Fields with prescribed quadratic form schemes. **80f:10024**
Lewis, D. W. Frobenius algebras and Hermitian forms. **80h:10029**
Nikulin, V. V. Integer symmetric bilinear forms and some of their geometric applications. (Russian) **80j:10031**
Ono, Takashi (*with* Yamaguchi, Hiroyuki) On Hasse principle for division of quadratic forms. **80e:10023**
Tort, Jean-René Sur deux invariants d'un corps de niveau fini. **80a:10035**
Ware, Roger Quadratic forms and profinite 2-groups. **80f:10025**
Yamaguchi, Hiroyuki *See* **Ono, Takashi, 80e:10023**

Secondary classifications:

Alexander, John P. (*with* Conner, P. E.; Hamrick, Gary C.) Metabolic and hyperbolic forms. **(80e:57038)**
Bayer, Eva (*with* Michel, Françoise) Finitude du nombre des classes d'isomorphisme des structures isometriques entières. **(80m:57015)**
Carlsson, G. (*with* Milgram, R. James) The structure of odd L-groups. **(80m:57025)**
Cohen, David Mordecai (*with* Resnikoff, H. L.) Hermitian quadratic forms and Hermitian modular forms. **(80b:10039)**
Conner, P. E. *See* **Alexander, John P.; et al., (80e:57038)**
Elman, R. (*with* Lam, T. Y.; Wadsworth, Adrian R.) Function fields of Pfister forms. **(80m:10017)**
Gentile, Enzo R. (*with* Shapiro, Daniel B.) Conservative quadratic forms. **(80a:15027)**
Gibbs, David E. Witt classes of integral representations of an abelian 2-group. **(80k:57062)**
Hamrick, Gary C. *See* **Alexander, John P.; et al., (80e:57038)**
Johnsen, Karsten Über orthogonale Zerlegungen metrischer G-Moduln. **(80k:15037)**
Kanzaki, Teruo Notes on Hermitian forms over a ring. **(80j:15015)**
Kopeiko, V. I. (*with* Suslin, A. A.) Quadratic modules over polynomial rings. (Russian) **(80k:13007)**
Lam, T. Y. *See* **Elman, R.; et al., (80m:10017)**
Michel, Françoise *See* **Bayer, Eva, (80m:57015)**
Milgram, R. James *See* **Carlsson, G., (80m:57025)**
Paques, Antonio Sur la cohomologie des formes quadratiques. **(80k:15038)**
Prestel, Alexander (*with* Ware, Roger) Almost isotropic quadratic forms. **(80e:12024)**
Resnikoff, H. L. *See* **Cohen, David Mordecai, (80b:10039)**
Shapiro, Daniel B. Similarities and isoclinic planes. **(80a:15029)**
See also **Gentile, Enzo R., (80a:15027)**
Suslin, A. A. *See* **Kopeiko, V. I., (80k:13007)**
Wadsworth, Adrian R. *See* **Elman, R.; et al., (80m:10017)**
Ware, Roger *See* **Prestel, Alexander, (80e:12024)**

10C07 Class numbers of quadratic and Hermitian forms

Asai, Teruaki The class numbers of positive definite quadratic forms. **80i:10028**
Orde, H. L. S. On Dirichlet's class number formula. **80a:10036**
Pfeuffer, Horst Über die reelle Spiegelungsgruppe $\mathfrak{G}_4$ und die Klassenzahl der sechsdimensionalen Einheitsform. **80a:10037**
On a conjecture about class numbers of totally positive quadratic forms in totally real algebraic number fields. (German summary) **80h:10030**

Secondary classifications:

Neumann, Walter D. Signature related invariants of manifolds. I. Monodromy and γ-invariants. **(80k:57048)**

10C10 Higher degree forms

Ferrero, Miguel (*with* Micali, Artibano) Sur les n-applications. **80j:10032**
Igusa, Jun-ichi ★Forms of higher degree. **80m:10020**
Micali, Artibano *See* **Ferrero, Miguel, 80j:10032**
Pfister, Albrecht Systems of quadratic forms. **80j:10033**
Servedio, Frank J. Canonical reducible cubic forms in n (>3)-variables and their infinite orthogonal groups. **80h:10031a**
Erratum to: "Canonical reducible cubic forms in n (>3)-variables and their infinite orthogonal groups" (J. Pure Appl. Algebra **15** (1979), no. 3, 283–291). **80h:10031b**

Secondary classifications:

Myerson, Gerald On the numbers of zeros of diagonal cubic forms. **(80e:12023)**
Schlickewei, Hans Peter On indefinite diagonal forms in many variables. **(80f:10041)**
Wall, C. T. C. Affine cubic functions. I. The complex plane. **(80h:14011)**

10C15 Analytic theory (Epstein's zeta function; relations with automorphic forms and functions)

Kitaoka, Yoshiyuki Modular forms of degree n and representation by quadratic forms. **80k:10018**
Suzuki, Toshiaki On zeta functions associated with quadratic forms of variable coefficients. **80j:10034**

Secondary classifications:

Asai, Teruaki The class numbers of positive definite quadratic forms. **(80i:10028)**
Fitoubi, Ahmed Fonction zêta d'Epstein pour un opérateur elliptique qui dégénère dans la direction normale. **(80g:58048)**
Igusa, Jun-ichi ★Forms of higher degree. **(80m:10020)**
Katayama, Koji On the values of Eisenstein series. **(80f:10029)**
Kubert, Daniel Sion (*with* Lang, Serge) Stickelberger ideals. **(80a:10042a)**
(*with* Lang, Serge) The index of Stickelberger ideals of order 2 and cuspidal class numbers. **(80a:10042b)**
Lang, Serge *See* **Kubert, Daniel Sion, (80a:10042a)** *and* **Kubert, Daniel Sion, (80a:10042b)**
Perlis, Robert (*with* Schinzel, A.) Zeta functions and the equivalence of integral forms. **(80j:12008)**
Schinzel, A. *See* **Perlis, Robert, (80j:12008)**
Terras, A. Real zeroes of Epstein's zeta function for ternary positive definite quadratic forms. **(80g:10042)**

10C20 p-adic theory

10C25 Minima of forms [See also 10E20.]

Hans-Gill, R. J. (*with* Raka, Madhu) An asymmetric inequality for nonhomogeneous ternary quadratic forms. **80i:10029**
Raka, Madhu *See* **Hans-Gill, R. J., 80i:10029**
Setzer, C. Bennett The structure of minima for binary quadratic forms. **80i:10030**

10C30 Arithmetic properties of classical groups [See also 20Gxx.]

Bondarenko, A. A. (*with* Rapinčuk, A. S.) On an estimate of the number of double cosets of adèle groups of algebraic groups. (Russian. English summary) **80b:10030**
See also **Platonov, V. P.; et al., 80d:10035**
Chahal, Jasbir Singh A note on the discontinuous subgroups of the orthogonal group. **80h:10032**
Kac, V. G. (*with* Vinberg, È. B.) Spinors of 13-dimensional space. **80c:10022**
Platonov, V. P. (*with* Bondarenko, A. A.; Rapinčuk, A. S.) Numbers of classes of algebraic groups. (Russian) **80d:10035**
Rapinčuk, A. S. *See* **Bondarenko, A. A., 80b:10030** *and* **Platonov, V. P.; et al., 80d:10035**
Vinberg, È. B. *See* **Kac, V. G., 80c:10022**

Secondary classifications:

Ellers, Erich W. Radical relations in unitary, symplectic, and orthogonal groups. **(80c:20059)**
Grecu, Eftimie Sur la variété du groupe orthogonal simplectique. **(80h:20063)**
James, D. G. Unitary geometry over local rings. **(80b:10029)**
Jarden, Moshe Torsion in linear algebraic groups over large algebraic fields. **(80m:12027)**
Johnson, Arnold A. The automorphisms of the orthogonal groups $\Omega_n(V)$, $n>5$. **(80h:20054)**
O'Meara, O. T. ★Symplectic groups. **(80a:20045)**
Servedio, Frank J. Canonical reducible cubic forms in n (>3)-variables and their infinite orthogonal groups. **(80h:10031a)**
Zink, Thomas Über die Anzahl der Spitzen einiger arithmetischer Untergruppen unitärer Gruppen. **(80f:22028)**

10C99 None of the above, but in this section

Ishibashi, Hiroyuki Generators of $O_n(V)$ over a quasisemilocal semihereditary domain. **80g:10024**

Kaplansky, Irving Composition of quadratic and alternate forms. **80e:10024**

Secondary classifications:

Kleinstein, Jerrold L. (*with* Rosenberg, Alex) Signatures and semisignatures of abstract Witt rings and Witt rings of semilocal rings. **(80a:13028)**
Rosenberg, Alex *See* **Kleinstein, Jerrold L., (80a:13028)**

10Dxx Theory of automorphic and modular functions and forms [See also 12A67, 12B27, 14Gxx, 14Kxx, 22E50, 22E55, 30F35, 32Nxx; for relations with quadratic forms, see 10C15.]

Secondary classifications:

(Borel, Armand) *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
(Casselman, W.) *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
Kenku, M. A. The modular curve $X_0(39)$ and rational isogeny. **(80g:14023)**
Automorphic forms, representations and *L*-functions ★Automorphic forms, representations and *L*-functions. Part 1. **(80g:10002a)**
★Automorphic forms, representations, and *L*-functions. Part 2. **(80g:10002b)**
Corvallis, Ore. *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
***L*-functions** *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
Proceedings of Symposia in Pure Mathematics *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
Summer Research Institute:
American Mathematical Society *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**

10D05 Modular and automorphic functions

Kubert, Daniel Sion (*with* Lang, Serge) Independence of modular units on Tate curves. **80f:10026**
Lang, Serge *See* **Kubert, Daniel Sion, 80f:10026**
Li, Wen Ch'ing Winnie On modular functions in characteristic p. **80c:10023**
Vélu, Jacques Quelques identités entre formes modulaires. **80b:10031**
Walker, Peter L. On the functional equations satisfied by modular functions. **80c:10024**
Yui, Noriko Correction: "Explicit form of the modular equation" (J. Reine Angew. Math. **299/300** (1978), 185–200). **80b:10032**

Secondary classifications:

Buser, Peter The collar theorem and examples. **(80h:53046)**
Jørgensen, Troels Comments on a discreteness condition for subgroups of $SL(2, \mathbb{C})$. **(80h:22013)**
Kubert, Daniel Sion (*with* Lang, Serge) The p-primary component of the cuspidal divisor class group on the modular curve $X(p)$. **(80c:12008)**
Lang, Serge *See* **Kubert, Daniel Sion, (80c:12008)**
Mazur, B. Modular curves and the Eisenstein ideal. **(80c:14015)**
Ribet, Kenneth A. Sur la recherche des p-extensions non ramifiées de $\mathbb{Q}(\mu_p)$. (English summary) **(80f:12005)**
Shih, Kuang-yen p-division points on certain elliptic curves. **(80d:10042)**

10D07 Structure of modular groups and generalizations, arithmetic groups [See also 20H05, 20H10, 22E40.]

Chahal, Jasbir Singh Arithmetic subgroups of $SL(n, k)$. **80i:10031**
Godsil, C. D. (*with* Imrich, Wilfried; Razen, R. A.) On the number of subgroups of given index in the modular group. **80k:10019**
Grosche, Jürgen Über verallgemeinerte Hermitesche Modulgruppen. **80a:10038**
Imrich, Wilfried *See* **Godsil, C. D.; et al., 80k:10019**
Kalia, R. N. (*with* Rosenberger, Gerhard) Automorphisms of the Fuchsian groups of type $(0; 2, 2, 2, q; 0)$. **80a:10039**
Köhler, Günter Über die maximale diskrete rationale Erweiterung Siegelscher Stufengruppen. **80f:10027**
Newman, Morris Normalizers of modular groups. **80b:10033**
Razen, R. A. *See* **Godsil, C. D.; et al., 80k:10019**
Rosenberger, Gerhard *See* **Kalia, R. N., 80a:10039**
Scharlemann, Martin Subgroups of $SL(2, \mathbb{R})$ freely generated by three parabolic elements. **80k:10020**
Ts'ao, Liang Chi Saturation problem for Hilbert modular groups. **80f:10028**

Secondary classifications:

Ando, Kiyoshi (*with* Mizuno, Hirobumi) On certain discontinuous groups. I. (Japanese. English summary) **(80f:32022)**
Cohen, Jeffrey M. On Hurwitz extensions by $PSL_2(7)$. **(80j:30069)**
Dickson, N. K. *See* **Mason, A. W., (80j:20047)**
Mason, A. W. (*with* Dickson, N. K.) On maximal nonparabolic normal subgroups of the modular group. **(80j:20047)**
Mizuno, Hirobumi *See* **Ando, Kiyoshi, (80f:32022)**
Stothers, W. W. Subgroups of infinite index in the modular group. **(80b:20060)**
Diagrams associated with subgroups of Fuchsian groups. **(80j:20048)**

10D12 Modular forms, one variable

Ackerman, Michael On the generating functions of certain Eisenstein series. **80k:10021**
Asai, Tetsuya On the Doi-Naganuma lifting associated with imaginary quadratic fields. **80b:10034**
Atkin, A. O. L. (*with* Li, Wen Ch'ing Winnie) Twists of newforms and pseudo-eigenvalues of W-operators. **80a:10040**
Berndt, Bruce C. Analytic Eisenstein series, theta-functions, and series relations in the spirit of Ramanujan. **80b:10035**
Eichler, M. On the representation of modular forms by theta series. **80k:10022**
Gundlach, Karl-Bernhard On the representation of a number as a sum of squares. **80b:10036**
Hsiao, Hong Jên (*with* Lee, Hong Chang) Hecke operators on modular forms. **80g:10025**
Jochnowitz, Naomi The index of the Hecke ring, T_k, in the ring of integers of $T_k \otimes \mathbb{Q}$. **80k:10023**
Katayama, Koji On the values of Eisenstein series. **80f:10029**
Kojima, Hisashi Rankin's method in the case of level $4q$ and its applications to the Doi-Naganuma lifting. **80j:10035**
Kubert, Daniel Sion The logarithm of the Siegel function. **80f:10030**
Lee, Hong Chang *See* **Hsiao, Hong Jên, 80g:10025**
Li, Wen Ch'ing Winnie *See* **Atkin, A. O. L., 80a:10040**
Maass, Hans Über eine Spezialschar von Modulformen zweiten Grades. **80f:10031**
Moreno, Carlos Julio The Petersson inner product and the residue of an Euler product. **80i:10032**
Schoeneberg, Bruno Bemerkungen zu den Eisensteinschen Reihen und ihren Anwendungen in der Arithmetik. **80c:10025**
Snyder, Chip Partial fraction decompositions and Kummer congruences for the normalized coefficients of the Laurent expansion of elliptic functions parametrizing a nonsingular cubic curve in Hessian normal form. **80d:10036**
Waldspurger, J.-L. Engendrement par des séries thêta de certains espaces de formes modulaires. **80d:10037**

Secondary classifications:

Bertrand, Daniel Sur les périodes de formes modulaires. (English summary) **(80b:10048)**

10D15 Automorphic forms, one variable

Hatada, Kazuyuki Eigenvalues of Hecke operators on $SL(2, \mathbb{Z})$. **80b:10037**
Kurčanov, P. F. The cohomology of discrete groups and Dirichlet series that are related to Jacquet-Langlands cusp forms. (Russian) **80b:10038**
Rallis, S. (*with* Schiffmann, G.) Automorphic forms constructed from the Weil representation: holomorphic case. **80d:10038**
Saito, Hiroshi Automorphic forms and algebraic extensions of number fields. II. **80h:10033**
Schiffmann, G. *See* **Rallis, S., 80d:10038**
Vencov, A. B. The Selberg trace formula for a Hecke operator that is generated by an involution, and eigenvalues of the Laplace-Beltrami operator on the fundamental domain of the modular group PSL $(2, \mathbb{Z})$. (Russian) **80g:10026**

Secondary classifications:

Buser, Peter Riemannsche Flächen mit grosser Kragenweite. **(80k:53071)**
Goss, David von Staudt for $F_q[T]$. **(80a:12019)**
Green, Mark L. On the analytic solution of the equation of fifth degree. **(80c:14021)**
Gross, Benedict H. On an identity of Chowla and Selberg. **(80i:10037)**
Ihara, Yasutaka Introduction to the work of Mr. Takuro Shintani, winner of the 6th Japan Mathematical Society Iyanaga Prize. (Japanese) **(80k:10003)**
Kolk, Johan Antoon Casper ★The Selberg trace formula and asymptotic behaviour of spectra. **(80a:22017)**
Wagreich, Philip Automorphic forms and singularities of complex surfaces. **(80k:32046)**

10D20 Modular and automorphic forms, several variables

Andrianov, A. N. Modular descent and the Saito-Kurokawa conjecture. **80k:10024**
Multiplicative arithmetic of Siegel's modular forms. (Russian) **80f:10032**
Arakawa, Tsuneo Dirichlet series corresponding to Siegel's modular forms. **80c:10026**
Cohen, David Mordecai (*with* Resnikoff, H. L.) Hermitian quadratic forms and Hermitian modular forms. **80b:10039**
Evdokimov, S. A. The rationality of generating series for the Fourier coefficients of Siegel modular forms of genus n. (Russian) **80k:10034**
Fomenko, O. M. The Siegel formula for genus 2. (Russian) **80k:10035**
Freitag, Eberhard Der Körper der Siegelschen Modulfunktionen. **80e:10025**
Ein Verschwindungssatz für automorphe Formen zur Siegelschen Modulgruppe. **80c:10026**
Gricenko, V. A. Analytic continuation of symmetric squares. (Russian) **80c:10027**
Hall, Rita On the cohomology of Kuga's fiber variety. **80a:10041**
Igusa, Jun-ichi On the ring of modular forms of degree two over $\mathbb{Z}$. **80d:10039**
Karel, M. Eisenstein series and fields of definition. **80c:10028**
Kubert, Daniel Sion (*with* Lang, Serge) Stickelberger ideals. **80a:10042a**
(*with* Lang, Serge) The index of Stickelberger ideals of order 2 and cuspidal class numbers. **80a:10042b**
Kudla, Stephen S. On certain arithmetic automorphic forms for $SU(1, q)$. **80f:10033**
Kurokawa, Nobushige Examples of eigenvalues of Hecke operators on Siegel cusp forms of degree two. **80b:10040**
Lang, Serge *See* **Kubert, Daniel Sion, 80a:10042a** *and* **Kubert, Daniel Sion, 80a:10042b**
Matsuda, Isao Correction to my article: "Dirichlet series corresponding to Siegel modular forms of degree 2, level N" [Sci. Papers College Gen. Ed. Univ. Tokyo **28** (1978), no. 1, 21–49; MR **58** £16530]. **80k:10036**
Nagaoka, Shôyû p-adic properties of Siegel modular forms of degree 2. **80g:10027**

Resnikoff, H. L. (*with* Tai, Y.-S.) On the structure of a graded ring of automorphic forms on the 2-dimensional complex ball. **80h:10037**
See also **Cohen, David Mordecai, 80h:10039**
Schmidt, Mechthild Über eine Methode zur Berechnung von Indizes bei Siegelschen Stufengruppen. **80c:10029**
Der Index Siegelscher Stufengruppen in ihrer maximalen diskreten rationalen Erweiterung. **80k:10025**
Shimura, Goro The special values of the zeta functions associated with Hilbert modular forms. **80a:10043**
Tai, Y.-S. *See* **Resnikoff, H. L., 80h:10037**

Secondary classifications:

Apanasov, B. N. Entire automorphic forms in $\mathbf{R}^n$. (Russian) **(80e:30024)**
Fegan, H. D. The heat equation on a compact Lie group. **(80g:22010)**
Kitaoka, Yoshiyuki Modular forms of degree n and representation by quadratic forms. **(80k:10018)**
Koizumi, Shoji The equations defining abelian varieties and modular functions. **(80i:14016)**
Rallis, S. (*with* Schiffmann, G.) Automorphic forms constructed from the Weil representation: holomorphic case. **(80d:10038)**
Rapoport, M. Compactifications de l'espace de modules de Hilbert-Blumenthal. **(80j:14009)**
Schiffmann, G. *See* **Rallis, S., (80d:10038)**

10D21 Hilbert modular forms and surfaces [See also 14J20.]

Hirzebruch, F. (*with* Van de Ven, Antonius) Minimal Hilbert modular surfaces with $p_g = 3$ and $k^2 = 2$. **80d:10040**
Kifer, M. I. (*with* Skornjakov, I. A.) Hilbert-Kuga-Sato varieties and parabolic differentials. (Russian) **80j:10036**
Kudla, Stephen S. Intersection numbers for quotients of the complex 2-ball and Hilbert modular forms. **80a:10044**
Skornjakov, I. A. *See* **Kifer, M. I., 80j:10036**
Tong, Yue Lin Lawrence Weighted intersection numbers on Hilbert modular surfaces. **80f:10034**
Van de Ven, Antonius *See* **Hirzebruch, F., 80d:10040**

Secondary classifications:

van der Geer, G. Minimal models for Hilbert modular surfaces of principal congruence subgroups. **(80j:14031)**
Gundlach, Karl-Bernhard On the representation of a number as a sum of squares. **(80b:10036)**
Kojima, Hisashi Rankin's method in the case of level $4q$ and its applications to the Doi-Naganuma lifting. **(80j:10035)**

10D23 Congruence properties

Secondary classifications:

Schmidt, Mechthild Der Index Siegelscher Stufengruppen in ihrer maximalen diskreten rationalen Erweiterung. **(80k:10025)**

10D24 Relations with Dirichlet series

Arakawa, Tsuneo Dirichlet series related to the Eisenstein series on the Siegel upper half-plane. **80b:10041**
Hsiao, Heng Jên A remark on Hecke's theory on Dirichlet series with functional equation. **80j:10037**
Kurčanov, P. F. Dirichlet series of Jacquet-Langlands cusp forms over fields of CM-type. (Russian) **80c:10030**
Miao, Lung Chi Fastautomorphe Dirichletfunktionen. **80i:10033**
Pančiškin, A. A. Values of convolutions of Hecke-Shimura series at lattice points. (Russian) **80c:10031**
Symmetric squares of Hecke series and their values at lattice points. (Russian) **80f:10035**
Pizer, Arnold A note on a conjecture of Hecke. **80g:10028**
Schoeneberg, Bruno Zusammenhang von Dirichletschen Reihen mit Funktionalgleichung, Integralen 3. Gattung und Thetareihen in der Theorie der Modulfunktionen. **80c:10032**
Suzuki, Toshiaki Distributions with automorphy and Dirichlet series. **80h:10038**
Žuravlev, V. G. The zeros of the Dirichlet series associated with Hilbert modular forms on the critical line. (Russian) **80e:10027**

Secondary classifications:

Ackerman, Michael On the generating functions of certain Eisenstein series. **(80k:10021)**
Andrianov, A. N. Modular descent and the Saito-Kurokawa conjecture. **(80k:10024)**
Arakawa, Tsuneo Dirichlet series corresponding to Siegel's modular forms. **(80c:10026)**
Hejhal, Dennis A. A note on the Voronoĭ summation formula. **(80f:10052)**
Lang, Serge Relations de distributions et exemples classiques. **(80c:10033)**
Patterson, S. J. On Dirichlet series associated with cubic Gauss sums. **(80g:10041)**
Suzuki, Toshiaki On zeta functions associated with quadratic forms of variable coefficients. **(80j:10034)**
Venkov, A. B. A formula for the Čebyšev psi-function. (Russian) **(80f:10053)**
Yamaguchi, Satoru Spectra of flag manifolds. **(80h:58056)**

10D25 Complex multiplication [See also 14K22.]

Katz, Nicholas M. p-adic L-functions for CM fields. **80h:10039**
Kurčanov, P. F. Local measures connected with Jacquet-Langlands cusp forms over fields of CM-type. (Russian) **80d:10041**

Secondary classifications:

Gross, Benedict H. On an identity of Chowla and Selberg. **(80i:10037)**
Katayama, Koji On the values of Eisenstein series. **(80f:10029)**
Kurihara, Akira On some examples of equations defining Shimura curves and the Mumford uniformization. **(80e:14010)**
Vincze, E. Über die Einführung der komplexen Zahlen mittels Funktionalgleichungen. **(80f:39010)**
Williams, Kenneth S. Evaluation of character sums connected with elliptic curves. **(80b:10054)**
Zăgănescu, M. Energy spectrum and statistical sum of a system of $4k$ particles. (Romanian summary) **(80e:81038b)**

10D30 p-adic theory, local fields [See also 14G20, 22E50.]

Secondary classifications:

Bertrand, Daniel Fonctions modulaires, courbes de Tate et indépendance algébriques. **(80c:10035)**
Kurčanov, P. F. The cohomology of discrete groups and Dirichlet series that are related to Jacquet-Langlands cusp forms. (Russian) **(80b:10038)**
Ribet, Kenneth A. p-adic L-functions attached to characters of p-power order. (French summary) **(80b:12012)**

10D35 Galois properties

Lang, Serge Relations de distributions et exemples classiques. **80c:10033**
Shih, Kuang-yen p-division points on certain elliptic curves. **80d:10042**

Secondary classifications:

(Goldfeld, D.) *See* **Mazur, B., (80h:14022)**
Mazur, B. Rational isogenies of prime degree (with an appendix by D. Goldfeld). **(80h:14022)**
Toki, Keisuke Some remarks on invariants of abelian varieties concerning the reduction theory. **(80f:14023)**
Zarhin, Ju. G. Abelian varieties, l-adic representations and SL_2. (Russian) **(80i:14017)**

10D40 Representation-theoretic methods, trace formulas

Arthur, James G. A trace formula for reductive groups. I. Terms associated to classes in $G(\mathbf{Q})$. **80d:10043**
Jacquet, Hervé (*with* Piatetski-Shapiro, I. I.; Shalika, Joseph) Automorphic forms on GL(3). I. **80i:10034a**
(*with* Piatetski-Shapiro, I. I.; Shalika, Joseph) Automorphic forms on GL(3). II. **80i:10034b**
Piatetski-Shapiro, I. I. *See* **Jacquet, Hervé; et al., 80i:10034a** *and* **Jacquet, Hervé; et al., 80i:10034b**
Shalika, Joseph *See* **Jacquet, Hervé; et al., 80i:10034a** *and* **Jacquet, Hervé; et al., 80i:10034b**
Skriganov, M. M. *See* **Venkov, A. B., 80i:10036**
Venkov, A. B. (*with* Vinogradov, A. I.) Asymptotic distribution of the norms of the classes and the spectral characteristics of cusp forms of weight zero for a Fuchsian group. (Russian) **80i:10035**
(*with* Skriganov, M. M.) On the question of H. Weyl's formula in the spectral theory of automorphic functions. (Russian) **80i:10036**
Vinogradov, A. I. *See* **Venkov, A. B., 80i:10035**
Zimmerlé, Alain Formule sommatoire pour la transformation de Fourier sphérique. **80b:10042**

Secondary classifications:

Barbasch, Dan Fourier inversion for unipotent invariant integrals. **(80j:22007)**
Chen, Su Shing Spectra of discrete uniform subgroups of semisimple Lie groups. **(80e:22016)**
Donnelly, Harold Asymptotic expansions for the compact quotients of properly discontinuous group actions. **(80h:58049)**
Henniart, Guy ★Représentations du groupe de Weil d'un corps local. **(80m:12016)**
Ihara, Yasutaka Introduction to the work of Mr. Takuro Shintani, winner of the 6th Japan Mathematical Society Iyanaga Prize. (Japanese) **(80k:10003)**
Knapp, A. W. (*with* Zuckerman, Gregg) Normalizing factors, tempered representations, and L-groups. **(80m:22021)**
Mackey, George W. ★Unitary group representations in physics, probability, and number theory. **(80i:22001)**
Shahidi, Freydoon Modular forms and L-functions for GL_2. **(80g:12008)**
Wolpert, Scott The length spectra as moduli for compact Riemann surfaces. **(80j:58067)**
Yamazaki, Tadashi On a generalization of the Fourier transformation. **(80a:22019)**
Zuckerman, Gregg *See* **Knapp, A. W., (80m:22021)**

10D45 Uniformization, periods and cohomology

Gross, Benedict H. On an identity of Chowla and Selberg. **80i:10037**

Secondary classifications:

Apanasov, B. N. Entire automorphic forms in $\mathbf{R}^n$. (Russian) **(80e:30024)**
Venkov, A. B. (*with* Vinogradov, A. I.) Asymptotic distribution of the norms of the classes and the spectral characteristics of cusp forms of weight zero for a Fuchsian group. (Russian) **(80i:10035)**

Vinogradov, A. I. *See* **Venkov, A. B., (80f:10035)**

10D99 None of the above, but in this section

Secondary classifications:

Rohlfs, J. Arithmetisch definierte Gruppen mit Galoisoperation. **(80j:20043)**

10Exx Geometry of numbers

10E05 Lattices and convex bodies [See also 10J25.]

Brostow, Witold (*with* Dussault, Jean-Pierre) Construction of Voronoi polyhedra. **80b:10043**
Dussault, Jean-Pierre *See* **Brostow, Witold, 80b:10043**
Hammer, Joseph Lattice points and area-diameter relation. **80d:10044**
Hossain, F. (*with* Worley, R. T.) Positive points in polar lattices. **80a:10045**
Worley, R. T. *See* **Hossain, F., 80a:10045**

Secondary classifications:

Arkinstall, J. R. (*with* Scott, Paul R.) An isoperimetric problem with lattice point constraints. **(80h:52011)**
Hadwiger, H. Gitterpunktanzahl im Simplex und Wills'sche Vermutung. **(80d:52015)**
Scott, Paul R. *See* **Arkinstall, J. R., (80h:52011)**
Wills, Jörg M. Gitterzahlen und innere Volumina. **(80b:52010)**

10E10 Nonconvex bodies

10E15 Products of linear forms

Bakiev, K. (*with* Pen, A. S.; Skubenko, B. F.) On an upper bound for the product of linear inhomogeneous forms. (Russian) **80h:10040a**
Narzullaev, H. N. (*with* Skubenko, B. F.) A refinement of the estimate of the arithmetical minimum of the product of inhomogeneous linear forms (on the inhomogeneous Minkowski conjecture). (Russian) **80h:10040b**
Pen, A. S. *See* **Bakiev, K.; et al., 80h:10040a**
Skubenko, B. F. *See* **Bakiev, K.; et al., 80h:10040a** *and* **Narzullaev, H. N., 80h:10040b**

10E20 Minima of forms [See also 10C25.]

Conway, John H. (*with* Odlyzko, Andrew M.; Sloane, Neil J. A.) Extremal self-dual lattices exist only in dimensions 1 to 8, 12, 14, 15, 23, and 24. **80d:10045**
Odlyzko, Andrew M. *See* **Conway, John H.; et al., 80d:10045**
Sloane, Neil J. A. *See* **Conway, John H.; et al., 80d:10045**

Secondary classifications:

Barnes, E. S. Minkowski's fundamental inequality for reduced positive quadratic forms. **(80c:10034)**
Cohn, Harvey Note on dyadotropic cubics. **(80a:12010)**
Hans-Gill, R. J. (*with* Raka, Madhu) An asymmetric inequality for nonhomogeneous ternary quadratic forms. **(80i:10029)**
Mostow, G. D. Discrete subgroups of Lie groups. **(80m:22013)**
Raka, Madhu *See* **Hans-Gill, R. J., (80i:10029)**
Rosenberger, Gerhard Über die diophantische Gleichung $ax^2 + by^2 + cz^2 = dxyz$. **(80d:10030)**
Setzer, C. Bennett The structure of minima for binary quadratic forms. **(80i:10030)**
Stuffeldt, R. E. Reduction theory and K_3 of the Gaussian integers. **(80m:22014)**

10E25 Quadratic forms (reduction, extreme forms, etc.) [See also 10C05.]

Baranovskiĭ, E. P. *See* **Ryškov, S. S., 80f:10036**
Barnes, E. S. Minkowski's fundamental inequality for reduced positive quadratic forms. **80c:10034**
Minkowski's fundamental inequality for reduced positive quadratic forms. II. **80k:10026**
Craig, Maurice A cyclotomic construction for Leech's lattice. **80d:10046**
Donaldson, John L. Minkowski reduction of integral matrices. **80b:10044**
Esdlaev, K. M. An extremal problem for the four-dimensional Epstein ζ-function. (Russian) **80d:10047**
(Erdahl, Robert M.) *See* **Ryškov, S. S.; et al., 80f:10036**
Ryškov, S. S. (*with* Baranovskiĭ, E. P.) C-types of n-dimensional lattices and 5-dimensional primitive parallelohedra (with application to the theory of coverings). **80f:10036**
Trudy Mat. Inst. Steklov. *See* **Ryškov, S. S.; et al., 80f:10036**

Secondary classifications:

Chaix, Henri Points frontières de certains compacts convexes appartenant à un réseau, dans $\mathbf{R}^2$ et $\mathbf{R}^3$. **(80h:10056)**
Chalk, J. H. H. Zeros of quadratic forms. **(80k:10017)**
Hansen, Henry W. On the Gaussian Markoff spectrum. **(80f:10043)**

10E30 Lattice packing and covering [See also 05B40, 52A45.]

Sloane, Neil J. A. Self-dual codes and lattices. **80f:10037**

Secondary classifications:

Baranovskiĭ, E. P. *See* **Ryškov, S. S., (80f:10036)**
(Erdahl, Robert M.) *See* **Ryškov, S. S.; et al., (80f:10036)**
Robinson, Raphael M. Multiple tilings of n-dimensional space by unit cubes. **(80g:05027)**
Ryškov, S. S. (*with* Baranovskiĭ, E. P.) C-types of n-dimensional lattices and 5-dimensional primitive parallelohedra (with application to the theory of coverings). **(80f:10036)**
Trudy Mat. Inst. Steklov. *See* **Ryškov, S. S.; et al., (80f:10036)**

10E35 Mean value theorems

10E40 Transfer theorems

10E45 Automorphism groups of lattices [See also 10C30.]

Secondary classifications:

Pfeuffer, Horst Über die reelle Spiegelungsgruppe $\mathfrak{H}_4$ und die Klassenzahl der sechsdimensionalen Einheitsform. **(80a:10037)**

10E99 None of the above, but in this section

Secondary classifications:

Nowak, Werner-Georg Gitterpunkte in speziellen nicht-konvexen Bereichen. **(80j:10056)**

10Fxx Diophantine approximation [See also 10K15.]

Secondary classifications:

(Newman, Donald J.) *See* **Sprindžuk, Vladimir G., (80k:10048)**
(Silverman, Richard A.) *See* **Sprindžuk, Vladimir G., (80k:10048)**
Sprindžuk, Vladimir G. ★Metric theory of Diophantine approximations. **(80k:10048)**
Diophantine problems ★Diophantine problems. (Japanese) **(80e:10006)**
Kyoto *See* **Diophantine problems, (80e:10006)**
Symposium:
Diophantine Problems *See* **Diophantine problems, (80e:10006)**

10F05 Approximation to one number

Baker, R. C. On numbers with many rational approximations. **80f:10038**
Danilov, L. V. Rational approximations of some functions at rational points. (Russian) **80a:10046**
Davis, C. S. Rational approximations to e. **80a:10047**
Güting, Rainer Rationale Approximation mit Hilfe pythagoräischer Zahlen. (English summary) **80f:10039**
Ivanov, V. A. A theorem of Dirichlet in the theory of Diophantine approximations. (Russian) **80f:10040**
Mendès France, Michel Sur le spectre de Lagrange d'un ensemble de nombres réels. **80d:10048**
Schlickewei, Hans Peter On indefinite diagonal forms in many variables. **80f:10041**

Secondary classifications:

Choodnovsky, Gregory V. Formules d'Hermite pour les approximants de Padé de logarithmes et de fonctions binômes, et mesures d'irrationalité. (English summary) **(80h:10041)**

10F10 Simultaneous approximation

Bijlsma, A. ★Simultaneous approximations in transcendental number theory. **80d:10049**
Galočkin, A. I. Diophantine approximations of the value of certain entire functions with algebraic coefficients. I. (Russian. English summary) **80d:10050a**
Diophantine approximations of the values of certain entire functions with algebraic coefficients. II. (Russian. English summary) **80d:10050b**
Langmayr, Franz Zur simultanen Diophantischen Approximation. I. (English summary) **80j:10038a**
Zur simultanen Diophantischen Approximation. II. (English summary) **80j:10038b**
Reversat, Marc Approximations diophantiennes asymptotiques. **80g:10029**
Schmidt, Wolfgang M. (*with* Wang, Yuan) A note on a transference theorem of linear forms. **80e:10028**
Silverton, J. V. On the generation of "magic integers". **80a:10048**
Wang, Yuan (*with* Yu, Kun Rui; Zhu, Yao Chen) A transfer theorem for linear forms. (Chinese) **80k:10027**
See also **Schmidt, Wolfgang M., 80e:10028**
Yu, Kun Rui *See* **Wang, Yuan; et al., 80k:10027**
Zhu, Yao Chen *See* **Wang, Yuan; et al., 80k:10027**

10F15 Nonhomogeneous approximation

Liu, Ming Chit Approximation by a sum of polynomials of different degrees involving primes. **80k:10028**

Secondary classifications:

Lau, Kee Wai (*with* Liu, Ming Chit) Linear approximation by primes. **(80e:10032)**
Liu, Ming Chit *See* **Lau, Kee Wai, (80e:10032)**

10F20 Continued fractions and generalizations [See also 10A32, 10K10.]

Cusick, T. W. (*with* Mendès France, Michel) The Lagrange spectrum of a set. **80i:10038a**

Ferguson, H. R. P. (*with* Forcade, R. W.) Generalization of the Euclidean algorithm for real numbers to all dimensions higher than two. **80i:10039**

Forcade, R. W. *See* **Ferguson, H. R. P., 80i:10039**

Fraenkel, A. S. (*with* Mushkin, M.; Tassa, U.) Determination of $[n\theta]$ by its sequence of differences. **80d:10051**

Krupka, Z. I. Representation of the solution of a system of linear algebraic equations by means of continued fractions with positive terms. (Russian. English summary) **80m:10021**

Mendès France, Michel *See* **Cusick, T. W., 80i:10038a**

Mushkin, M. *See* **Fraenkel, A. S.; et al., 80d:10051**

Pass, Ralph P. On the partial quotients of algebraic integers. **80b:10045**

Tassa, U. *See* **Fraenkel, A. S.; et al., 80d:10051**

Woods, A. C. The Markoff spectrum of an algebraic number field. **80b:10046**

Secondary classifications:

Cusick, T. W. Integer multiples of periodic continued fractions. **(80b:10009)**

Ivanov, V. A. A theorem of Dirichlet in the theory of Diophantine approximations. (Russian) **(80f:10040)**

Jurkat, W. B. (*with* Peyerimhoff, A.) Characteristic approximation properties of quadratic irrationals. **(80a:10050)**

Mendès France, Michel Sur le spectre de Lagrange d'un ensemble de nombres réels. **(80d:10048)**

Peyerimhoff, A. *See* **Jurkat, W. B., (80a:10050)**

Shallit, Jeffrey Simple continued fractions for some irrational numbers. **(80k:10006)**

10F25 Approximation to algebraic numbers

Adachi, Norio On the effective bound for the solutions to Thue-Siegel-Roth's inequality. **80f:10042**

Dobrowolski, E. On a question of Lehmer and the number of irreducible factors of a polynomial. **80i:10040**

Mendès France, Michel Sur le spectre de Lagrange. **80i:10038b**

Stewart, Cameron L. On a theorem of Kronecker and a related question of Lehmer. **80j:10039**

Secondary classifications:

Kiss, Péter Zero terms in second-order linear recurrences. **(80j:10015)**

Lawton, Wayne Asymptotic properties of roots of polynomials—preliminary report. **(80i:12003)**

Pass, Ralph P. On the partial quotients of algebraic integers. **(80b:10045)**

10F30 Approximation by numbers from a fixed field

Dubois, Eugène Meilleures approximations diophantiennes. Application à la recherche de l'unité fondamentale des corps cubiques non totalement réels. (English summary) **80g:10030**

Hansen, Henry W. On the Gaussian Markoff spectrum. **80f:10043**

Rieger, G. J. Über Ford-Kugeln. **80b:10047**

Secondary classifications:

Hirvonen, Kullervo Bemerkungen über Lösungseigenschaften der Randwertprobleme für die Wellengleichung. **(80e:35035)**

Loxton, J. H. (*with* Van der Poorten, Alfred J.) Multidimensional generalizations of the Padé table. **(80h:30037)**

Van der Poorten, Alfred J. *See* **Loxton, J. H., (80h:30037)**

10F35 Irrationality and transcendence

Bertrand, Daniel Une mesure de transcendance liée à la torsion des courbes elliptiques. **80m:10022**

Fonctions modulaires, courbes de Tate et indépendance algébriques. **80c:10035**

Sur les périodes de formes modulaires. (English summary) **80b:10048**

Brownawell, W. Dale Travaux récents de Ju. V. Nesterenko. **80c:10036**

Bundschuh, Peter Une nouvelle application de la méthode de Gel'fond. **80g:10031**

Scharfe Irrationalitätsmasse für Zahlen, die mit Bessel-Funktionen zusammenhängen. **80c:10037**

Choodnovsky, Gregory V. Values of meromorphic functions of order 2. (French summary) **80c:10038**

A new method for the investigation of arithmetical properties of analytic functions. **80j:10040**

Approximations rationnelles des logarithmes de nombres rationnels. (English summary) **80b:10049**

Un système explicite d'approximants de Padé pour les fonctions hypergéométriques généralisées, avec applications à l'arithmétique. (English summary) **80e:10029**

Formules d'Hermite pour les approximants de Padé de logarithmes et de fonctions binômes, et mesures d'irrationalité. (English summary) **80h:10041**

Čirskiĭ, V. G. The arithmetic properties of the values of hypergeometric functions with irrational parameters. (Russian. English summary) **80a:10049**

Erdős, Paul Some problems and results on the irrationality of the sum of infinite series. **80k:10029**

Escassut, Alain Type de transcendance p-adique. **80d:10052**

Flicker, Yuval Z. On analytic models of degenerating abelian varieties. (French summary) **80m:10023**

Gutnik, L. A. Irrationality of some quantities that contain $\zeta(3)$. (Russian) **80i:10041**

Jurkat, W. B. (*with* Peyerimhoff, A.) Characteristic approximation properties of quadratic irrationals. **80a:10050**

Laurent, Michel Transcendance de périodes d'intégrales elliptiques. (English summary) **80d:10053**

Masser, D. W. Polynomial interpolation in several complex variables. **80d:10054**

Nesterenko, Ju. V. The number π and Lindemann's theorem. (Russian) **80i:10042**

See also **Brownawell, W. Dale, 80c:10036**

Peyerimhoff, A. *See* **Jurkat, W. B., 80a:10050**

Reyssat, Éric Mesures de transcendance de nombres liés aux fonctions elliptiques. **80m:10024**

Travaux récents de G. V. Čudnovskij. **80m:10025**

Waldschmidt, Michel Nombres transcendants et fonctions sigma de Weierstrass. **80f:10044**

Transcendence measures for exponentials and logarithms. **80c:10039**

Secondary classifications:

Adams, William W. On the algebraic independence of certain Liouville numbers. **(80a:10051)**

Ando, Shiro (*with* Hirano, Teruhiko) On the proof of a formula of Wronski. **(80b:10017)**

(Apéry, R.) *See* **Van der Poorten, Alfred J., (80i:10054)**

Bernik, V. I. The Baker-Schmidt conjecture. (Russian. English summary) **(80k:10047)**

Bertrand, Daniel Modular function and algebraic independence. **(80k:10030)**

Bijlsma, A. ★Simultaneous approximations in transcendental number theory. **(80d:10049)**

Dvornicich, Roberto A criterion for the algebraic dependence of two complex numbers. (Italian summary) **(80d:10055)**

Escassut, Alain Problème des 4 exponentielles p-adiques et algèbres topologiquement de type fini. **(80i:32047)**

Hirano, Teruhiko *See* **Ando, Shiro, (80b:10017)**

Nikišin, E. M. Irrationality of values of functions $F(x, s)$. (Russian) **(80k:10031)**

Van der Poorten, Alfred J. A proof that Euler missed . . . Apéry's proof of the irrationality of $\zeta(3)$. **(80i:10054)**

10F37 Independence results

Adams, William W. On the algebraic independence of certain Liouville numbers. **80a:10051**

Bertrand, Daniel Modular function and algebraic independence. **80k:10030**

Brownawell, W. Dale On the Gel'fond-Fel'dman measure of algebraic independence. **80f:10045**

Choodnovsky, Gregory V. Indépendance algébrique des valeurs d'une fonction elliptique en des points algébriques. Formulation des résultats. (English summary) **80h:10042**

Dvornicich, Roberto A criterion for the algebraic dependence of two complex numbers. (Italian summary) **80d:10055**

Escassut, Alain p-adic transcendent type. I, II. **80j:10041**

Flicker, Yuval Z. Algebraic independence by a method of Mahler. **80i:10043**

Loxton, J. H. (*with* Van der Poorten, Alfred J.) Algebraic independence properties of the Fredholm series. **80c:10040**

Makarov, Ju. N. Estimates of the measure of linear independence for the values of E-functions. (Russian. English summary) **80m:10026a**

Nikišin, E. M. Irrationality of values of functions $F(x, s)$. (Russian) **80k:10031**

Salikhov, V. H. Estimates of the measures of linear independence and transcendence for the values of some E-functions in rational points. (Russian. English summary) **80m:10026b**

Schwarz, Wolfgang Vanishing sums of roots of unity. **80a:10052**

Šidlovskiĭ, A. B. On the estimates of the algebraic independence measures of the values of E-functions. **80m:10027**

Takeuchi, Mamoru On a theorem of Brownawell. **80h:10043**

Van der Poorten, Alfred J. *See* **Loxton, J. H., 80c:10040**

Secondary classifications:

Langevin, Michel Facteurs premiers d'entiers en progression arithmétique. **(80d:10065)**

10F40 Distribution modulo one [See also 10K05.]

Arhipov, G. I. (*with* Karacuba, A. A.; Čubarikov, V. N.) Distribution of fractional parts of polynomials of several variables. (Russian) **80e:10030**

Borel, Jean-Pierre Nombres premiers généralisés et équirépartition modulo 1. **80m:10028**

Boyd, David W. (*with* Steele, J. Michael) Monotone subsequences in the sequence of fractional parts of multiples of an irrational. **80h:10044**

Čubarikov, V. N. *See* **Arhipov, G. I.; et al., 80e:10030**

Hewitt, Edwin (*with* Katznelson, Yitzhak) Diophantine approximation in certain solenoids. **80d:10056**

Hua, Luo Geng (*with* Wang, Yuan) Uniform distribution and numerical analysis. I. Number-theoretic methods. (Chinese) **80i:10044a**

(*with* Wang, Yuan) Uniform distribution and numerical analysis. II. Number-theoretic method. (Chinese) **80i:10044b**

Karacuba, A. A. *See* **Arhipov, G. I.; et al., 80e:10030**

Katznelson, Yitzhak *See* **Hewitt, Edwin, 80d:10056**

Nowak, Werner-Georg Optimale Diskrepanzabschätzungen bei speziellen Dreiecksdoppelfolgen. **80i:10045**

Die Diskrepanz der Doppelfolgen $(cN^p - n^p)^{1/q}$ und einige Verallgemeinerungen. (English summary) **80m:10029**

O'Hara, Patrick J. On a problem of Erdős. **80b:10050**

Ostrowski, A. M. On rational approximations to an irrational number. (Italian summary) **80i:10046**

Ramshaw, Lyle On the gap structure of sequences of points on a circle. **80e:10031**
Reversat, Marc Sur les approximations diophantiennes simultanées asymptotiques. **80i:10047**
Steele, J. Michael *See* **Boyd, David W., 80h:10044**
Stegbuchner, Hans Eine mehrdimensionale Version der Ungleichung von LeVeque. (English summary) **80i:10048**
Wang, Yuan *See* **Hua, Luo Geng, 80i:10044a** *and* **Hua, Luo Geng, 80i:10044b**

Secondary classifications:

Stewart, Cameron L. Algebraic integers whose conjugates lie near the unit circle. (French summary) **(80a:12002)**

10F45 Approximation in non-Archimedean valuations

Morrison, John F. Approximation of p-adic numbers by algebraic numbers of bounded degree. **80a:10053**

Secondary classifications:

Bijlsma, A. ★Simultaneous approximations in transcendental number theory. **(80d:10049)**
Robba, Philippe Lemmes de Schwarz et lemmes d'approximations p-adiques en plusieurs variables. **(80e:32021)**
Schmidt, Wolfgang M. Thue's equation over function fields. **(80c:10020)**

10F99 None of the above, but in this section

Aparicio Bernardo, Emiliano Methods for the approximate calculation of the minimum uniform Diophantine deviation from zero on a segment. (Spanish) **80i:10049**
Gramain, François Fonctions entières arithmétiques. **80f:10046**
Lau, Kee Wai (*with* Liu, Ming Chit) Linear approximation by primes. **80e:10032**
Liu, Ming Chit *See* **Lau, Kee Wai, 80e:10032**

Secondary classifications:

Cusick, T. W. (*with* Kolesnik, G.) Turán's second theorem on sums of powers of complex numbers. **(80i:10061)**
Győry, K. (*with* Papp, Z. Z.) Effective estimates for the integer solutions of norm form and discriminant form equations. **(80b:10026)**
Kolesnik, G. *See* **Cusick, T. W., (80i:10061)**
Papp, Z. Z. *See* **Győry, K., (80b:10026)**

10Gxx Trigonometric sums, exponential sums and character sums

10G05 Exponential sums

Arhipov, G. I. (*with* Karacuba, A. A.) A new integral of I. M. Vinogradov type. (Russian) **80a:10054**
Carlitz, Leonard Explicit evaluation of certain exponential sums. **80j:10042**
Cook, Roger A note on character sums. **80j:10043**
Helversen-Pasotto, Anna L'identité de Barnes pour les corps finis. **80f:10047**
Karacuba, A. A. *See* **Arhipov, G. I., 80a:10054**
Lehmer, D. H. (*with* Lehmer, Emma) Picturesque exponential sums. I. **80m:10030**
Lehmer, Emma *See* **Lehmer, D. H., 80m:10030**
Nakai, Yoshinobu On the method of I. M. Vinogradov in the evaluation of exponential sums. (Japanese) **80j:10044**
Ramos, Zenaida E. An integral expression for the generalized Kummer sum. **80k:10032**
Suryanarayana, D. Generalization of two identities of Ramanujan and Eckford Cohen. (Italian summary) **80b:10051**
Vinogradov, I. M. ★Trigonometrical sums in number theory. **80a:10055**
Wolke, Dieter Exponentialsummen und Nullstellen von L-Reihen. **80h:10045**

Secondary classifications:

Calogero, F. (*with* Perelomov, A. M.) Some Diophantine relations involving circular functions of rational angles. **(80d:15010)**
Carlitz, Leonard A note on exponential sums. **(80d:12017)**
Perelomov, A. M. *See* **Calogero, F., (80d:15010)**
Schmidt, C.-G. Die Relationen von Gaußschen Summen und Kreiseinheiten. **(80k:12006)**
Steinmetz, Norbert Zur Wertverteilung von Exponentialpolynomen. (English summary) **(80e:30012)**

10G10 Estimates on exponential sums

Arhipov, G. I. The mean value of H. Weyl sums. (Russian) **80i:10050**
Babenko, K. I. The asymptotic behavior of the Dirichlet kernel of spherical means of multiple Fourier series. (Russian) **80c:10041**
Bartz, Krystyna Estimates for some special trigonometrical sums. **80k:10033**
Čubarikov, V. N. An asymptotic formula for the mean value of a multiple trigonometric sum. (Russian) **80i:10051**
Knižnerman, L. A. (*with* Sokolinskiĭ, V. Z.) Some estimates for rational trigonometric sums and sums of Legendre symbols. (Russian) **80j:10045**
Körner, O. (*with* Stähle, H.) Remarks on Hua's estimate of complete trigonometrical sums. **80k:10034**
Korobov, N. M. Trigonometric sums. (Russian) **80b:10052**
Montgomery, Hugh L. (*with* Niederreiter, Harald) Estimation optimale de sommes exponentielles. **80c:10042**
Niederreiter, Harald *See* **Montgomery, Hugh L., 80c:10042**
Patterson, S. J. On the distribution of Kummer sums. **80m:10031**
Pichorides, S. K. On a conjecture of Littlewood concerning exponential sums. I. **80d:10057a**
On a conjecture of Littlewood concerning exponential sums. II. **80d:10057b**
Smith, Robert A. On n-dimensional Kloosterman sums. **80i:10052**
Sokolinskiĭ, V. Z. *See* **Knižnerman, L. A., 80j:10045**
Stähle, H. *See* **Körner, O., 80k:10034**
Stepanov, S. A. An elementary method in algebraic number theory. (Russian) **80c:10043**
Toffin, Philippe Un exemple d'utilisation de la méthode de Vinogradov. **80k:10035**

Secondary classifications:

Arhipov, G. I. (*with* Karacuba, A. A.; Čubarikov, V. N.) Distribution of fractional parts of polynomials of several variables. (Russian) **(80e:10030)**
Čubarikov, V. N. *See* **Arhipov, G. I.; et al., (80e:10030)**
Fomenko, O. M. The distribution of numbers with a fixed number of different prime divisors. (Russian) **(80h:10049)**
Karacuba, A. A. *See* **Arhipov, G. I.; et al., (80e:10030)**
Patterson, S. J. On Dirichlet series associated with cubic Gauss sums. **(80g:10041)**
Scholssengeier, Johannes Eine neue Diskrepanz für gewisse Primzahlfolgen. **(80m:10038)**

10G15 Character sums

Apostol, Tom M. Primitive character sums and Dirichlet L-functions. **80g:10032**
Evans, Ronald J. (*with* Hill, Jay Roderick) The cyclotomic numbers of order sixteen. **80b:10053**
Hill, Jay Roderick *See* **Evans, Ronald J., 80b:10053**
Leonard, Philip A. (*with* Williams, Kenneth S.) Evaluation of certain Jacobsthal sums. (Italian summary) **80d:10058**
Williams, Kenneth S. Evaluation of character sums connected with elliptic curves. **80b:10054**
See also **Leonard, Philip A., 80d:10058**

Secondary classifications:

Gross, Benedict H. (*with* Koblitz, Neal) Gauss sums and the p-adic Γ-function. **(80g:12015)**
Koblitz, Neal *See* **Gross, Benedict H., (80g:12015)**

10G20 Estimates on character sums

Karacuba, A. A. The asymptotics of a certain arithmetical sum. (Russian) **80a:10055**
Smith, Robert A. On n-dimensional Kloosterman sums. **80e:10033**
Stepanov, S. A. Lower bounds for incomplete sums of the characters of polynomials. (Russian) **80k:10036**

10G99 None of the above, but in this section

Stephens, N. M. Dirichlet characters and polynomials. **80i:10053**

10Hxx Multiplicative theory

(Fernández, V.) *See* **Karacuba, A. A., 80k:10037**
Karacuba, A. A. ★Fundamentos de la teoría analítica de los números. (Spanish) [Principles of analytic number theory] **80k:10037**
Stečkin, S. B. Approximation theory and analytic number theory. (Russian) **80b:10056**

Secondary classifications:

(Borel, Armand) *See* **Automorphic forms, representations and L-functions, (80g:10002a)** *and* **Automorphic forms, representations and L-functions, (80g:10002b)**
(Casselman, W.) *See* **Automorphic forms, representations and L-functions, (80g:10002a)** *and* **Automorphic forms, representations and L-functions, (80g:10002b)**
Automorphic forms, representations and L-functions ★Automorphic forms, representations and L-functions. Part 1. **(80g:10002a)**
★Automorphic forms, representations, and L-functions. Part 2. **(80g:10002b)**
Corvallis, Ore. *See* **Automorphic forms, representations and L-functions, (80g:10002a)** *and* **Automorphic forms, representations and L-functions, (80g:10002b)**
L-functions *See* **Automorphic forms, representations and L-functions, (80g:10002a)** *and* **Automorphic forms, representations and L-functions, (80g:10002b)**
Proceedings of Symposia in Pure Mathematics *See* **Automorphic forms, representations and L-functions, (80g:10002a)** *and* **Automorphic forms, representations and L-functions, (80g:10002b)**
Summer Research Institute:
American Mathematical Society *See* **Automorphic forms, representations and L-functions, (80g:10002a)** *and* **Automorphic forms, representations and L-functions, (80g:10002b)**

10H05 Riemann's zeta function, functional equation

(Apéry, R.) *See* **Van der Poorten, Alfred J., 80i:10054**
Brent, Richard P. On the zeros of the Riemann zeta function in the critical strip. **80g:10033**
Goldstein, Larry Joel (*with* Razar, Michael) Ramanujan type formulas for $\zeta(2k-1)$. **80f:10048**
Good, A. Diskrete Mittel für einige Zetafunktionen. **80g:10034**
Griso, Georges Équirépartition et zéros de la fonction zêta (d'après E. Hlawka). **80b:10057**
Heath-Brown, D. R. The mean value theorem for the Riemann zeta-function. **80g:10035**
The twelfth power moment of the Riemann-function. **80d:10059**
Motohashi, Yoichi On Vinogradov's zero-free region for the Riemann zeta-function. **80a:10056**

Moser, Ján On a constant of Littlewood in the theory of the Riemann zeta function. (Russian. English and Slovak summaries) **80f:10049**

Newman, Morris (*with* Ryavec, C.; Shure, B. N.) The use of integral operators in number theory. **80h:10046**

Razar, Michael *See* **Goldstein, Larry Joel, 80f:10048**

te Riele, H. J. J. ★Tables of the first 15000 zeros of the Riemann zeta function to 28 significant digits, and related quantities. **80f:10050**

Ryavec, C. A new representation of $\zeta(s)$. **80f:10051**
A nonlinear analogue of the cardinal series. **80g:10036**
See also **Newman, Morris; et al., 80h:10046**

Shure, B. N. *See* **Newman, Morris; et al., 80h:10046**

Sitaramachandra Rao, R. (*with* Siva Rama Sarma, A.) Some identities involving the Riemann zeta function. **80h:10047**

Siva Rama Sarma, A. *See* **Sitaramachandra Rao, R., 80h:10047**

Van der Poorten, Alfred J. A proof that Euler missed . . . Apéry's proof of the irrationality of $\zeta(3)$. **80i:10054**

Secondary classifications:

Fujii, Akio On the uniformity of the distribution of the zeros of the Riemann zeta function. **(80g:10053)**
A prime number theorem in the theory of the Riemann zeta function. **(80m:10032)**

Gallagher, P. X. (*with* Mueller, Julia H.) Primes and zeros in short intervals. **(80b:10060)**

Heath-Brown, D. R. Zero density estimates for the Riemann zeta-function and Dirichlet L-functions. **(80i:10055)**

Mueller, Julia H. *See* **Gallagher, P. X., (80b:10060)**

Schoissengeier, Johannes The connection between the zeros of the ζ-function and sequences $(g(p))$, p prime, mod 1. **(80g:10054)**

Stark, E. L. Another way to sum $\Sigma(1/k^2)$. **(80b:10006)**

Voronin, S. M. Analytic properties of the derivatives of Dirichlet functions of arithmetic objects. (Russian) **(80b:10058)**

10H08 Dirichlet L-function, functional equation

Goldfeld, D. (*with* Viola, C.) Mean values of L-functions associated to elliptic, Fermat and other curves at the centre of the critical strip. **80j:10046**

Heath-Brown, D. R. The density of zeros of Dirichlet's L-functions. **80g:10037**

Hiiano, Teluhiko On the distribution of zeros of Dirichlet's L-function on the line $\sigma = 1/2$. II. **80a:10057**

Joly, J. R. (*with* Moser, Cl.) Ordre de grandeur de $L(1, \chi)$ et de $L'(1, \chi)$. (English summary) **80d:10060**

Laurinčikas, Antanas Distribution des valeurs de certaines séries de Dirichlet. (English summary) **80g:10038**

Moser, Cl. *See* **Joly, J. R., 80d:10060**

Motohashi, Yoichi On the zero-free region of Dirichlet's L-functions. **80a:10058**
A note on Siegel's zeros. **80d:10061**

Viola, C. *See* **Goldfeld, D., 80j:10046**

Voronin, S. M. Analytic properties of the derivatives of Dirichlet functions of arithmetic objects. (Russian) **80b:10058**

Žuravlev, V. G. The zeros of Dirichlet L-functions on short intervals of the critical line. (Russian) **80g:10039**

Secondary classifications:

Apostol, Tom M. Primitive character sums and Dirichlet L-functions. **(80g:10032)**

Chen, Jing Run On the least prime in an arithmetical progression and theorems concerning the zeros of Dirichlet's L-functions. II. **(80k:10042)**

Heath-Brown, D. R. Zero density estimates for the Riemann zeta-function and Dirichlet L-functions. **(80i:10055)**

Martinet, Jacques Petits discriminants. **(80c:12009)**

Ramachandra, K. Some remarks on a theorem of Montgomery and Vaughan. **(80j:10053)**

Redmond, Donald M. Mean value theorems for a class of Dirichlet series. **(80b:10065)**

Schoeneberg, Bruno Zusammenhang von Dirichletschen Reihen mit Funktionalgleichung, Integralen 3. Gattung und Thetareihen in der Theorie der Modulfunktionen. **(80c:10032)**

Wolke, Dieter Exponentialsummen und Nullstellen von L-Reihen. **(80h:10045)**

10H10 Other zeta functions {For local and global ground fields, see 12A70, 12A80, 12B30, 12B35; for algebro-geometric methods, see 14G10; see also 10C15, 10D40.}

Apostol, Tom M. Arithmetical subseries of series with multiplicative terms. **80d:10062**

Balasubramanian, R. A note on Hurwitz's zeta-function. **80k:10038**

Benedetto, J. J. Zeta functions for idelic pseudomeasures. **80k:10039**

Heath-Brown, D. R. Zero density estimates for the Riemann zeta-function and Dirichlet L-functions. **80i:10055**

Hejhal, Dennis A. A note on the Voronoĭ summation formula. **80f:10052**

Johnson, David Mean values of Hecke L-functions. **80g:10040**

Kaufman, R. M. A. F. Lavrik's truncated equations. (Russian) **80d:10063**

Patterson, S. J. On Dirichlet series associated with cubic Gauss sums. **80g:10041**

Pintz, János Siegel roots and the prime number theorem. (Hungarian. English summary) **80k:10040**

Terras, A. Real zeroes of Epstein's zeta function for ternary positive definite quadratic forms. **80g:10042**

Venkov, A. B. A formula for the Čebyšev psi-function. (Russian) **80f:10053**

Secondary classifications:

Cook, Roger A note on character sums. **(80j:10043)**

Èndibaev, K. M. An extremal problem for the four-dimensional Epstein ζ-function. (Russian) **(80d:10047)**
The extremal of Epstein's zeta function from four variables. (Russian) **(80f:65075)**

Fitouhi, Ahmed Fonction zêta d'Epstein pour un opérateur elliptique qui dégénère dans la direction normale. **(80g:58048)**

Hatada, Kazuyuki On the values at rational integers of the p-adic Dirichlet L functions. **(80f:12010)**

Koblitz, Neal A new proof of certain formulas for p-adic L-functions. **(80f:12011)**

Lang, Serge Sur la conjecture de Birch-Swinnerton-Dyer (d'après J. Coates et A. Wiles). **(80f:12012)**

Shimura, Goro The special values of the zeta functions associated with Hilbert modular forms. **(80a:10043)**

Suzuki, Toshiaki On zeta functions associated with quadratic forms of variable coefficients. **(80j:10034)**

Venkov, A. B. (*with* Vinogradov, A. I.) Asymptotic distribution of the norms of the classes and the spectral characteristics of cusp forms of weight zero for a Fuchsian group. (Russian) **(80i:10035)**

Vinogradov, A. I. *See* **Venkov, A. B., (80i:10035)**

Žuravlev, V. G. The zeros of the Dirichlet series associated with Hilbert modular forms on the critical line. (Russian) **(80e:10027)**

10H15 Distribution of primes and of integers with specified multiplicative properties

Chakravarty, I. C. On the limitability of certain number-theoretic functions. **80h:10048**

Chang, Teh Hsien When $x \to \infty$, the limit of $\{\pi(2x) - \pi(x)\} \div (x/\log x)$ is 1. (Chinese) **80b:10059**

Cook, Roger On the occurrence of large gaps between prime numbers. **80e:10034**

Erdős, Paul (*with* Penney, D. E.; Pomerance, Carl) On a class of relatively prime sequences. **80a:10059**

Fomenko, O. M. The distribution of numbers with a fixed number of different prime divisors. (Russian) **80h:10049**

Gallagher, P. X. (*with* Mueller, Julia H.) Primes and zeros in short intervals. **80b:10060**

Grimson, W. E. L. (*with* Hanson, Denis) Estimates for the product of the primes not exceeding x. **80i:10056**

Hanson, Denis *See* **Grimson, W. E. L., 80i:10056**

Heath-Brown, D. R. (*with* Iwaniec, Henryk) On the difference between consecutive primes. **80d:10064**
The differences between consecutive primes. II. **80k:10041**

Hooley, Christopher On the greatest prime factor of a cubic polynomial. **80b:10061**

Ivić, Aleksandar On sums of large differences between consecutive primes. **80i:10057**

Iwaniec, Henryk (*with* Jutila, Matti) Primes in short intervals. **80j:10047**
See also **Heath-Brown, D. R., 80d:10064**

Jutila, Matti *See* **Iwaniec, Henryk, 80j:10047**

Mueller, Julia H. *See* **Gallagher, P. X., 80b:10060**

Panaitopol, L. Eine Eigenschaft der Funktion über die Verteilung der Primzahlen. **80i:10058**

Penney, D. E. *See* **Erdős, Paul; et al., 80a:10059**

(Pintz, János) *See* **Turán, Pál, 80i:10060**

Pomerance, Carl *See* **Erdős, Paul; et al., 80a:10059**

Ricci, S. J. Mean-value theorems for primes in short intervals. **80a:10060**

Roesler, Friedrich Über die Verteilung der Primzahlen in Folgen der Form $[f(n+x)]$. **80i:10059**

Turán, Pál On a problem of E. Landau. **80i:10060**

Secondary classifications:

Norton, Karl K. On the number of restricted prime factors of an integer. II. **(80i:10072)**

Schoissengeier, Johannes Eine neue Diskrepanz für gewisse Primzahlfolgen. **(80m:10038)**

Subbarao, M. V. (*with* Suryanarayana, D.) Sums of the divisor and unitary divisor functions. **(80d:10069)**

Suryanarayana, D. *See* **Subbarao, M. V., (80d:10069)**

Tanaka, Minoru Experiments concerning the distribution of squarefree numbers. **(80g:10001)**

Turk, Jan Sets of integers composed of few prime numbers. **(80b:10007)**

10H20 Distribution in progressions and other sequences [See also 10L20.]

Chen, Jing Run On the least prime in an arithmetical progression and theorems concerning the zeros of Dirichlet's L-functions. II. **80k:10042**

Fujii, Akio A prime number theorem in the theory of the Riemann zeta function. **80m:10032**

Langevin, Michel Facteurs premiers d'entiers en progression arithmétique. **80d:10065**

Rieger, G. J. Remark on a paper of Stux concerning squarefree numbers in non-linear sequences. **80a:10061**

Sárközy, András Some remarks concerning irregularities of distribution of sequences of integers in arithmetic progressions. II. **80m:10033**

Wagstaff, Samuel S., Jr. The least prime in an arithmetic progression with prime difference. **80c:10044**

10H22 Turán theory

Cusick, T. W. (*with* Kolesnik, G.) Turán's second theorem on sums of powers of complex numbers. **80i:10061**

Kolesnik, G. *See* **Cusick, T. W., 80i:10061**

10H25 Asymptotic results on arithmetic functions

(Chowla, S.) *See* **Suryanarayana, D., 80a:10063**

De Koninck, Jean-Marie (*with* Ivić, Aleksandar) An asymptotic formula for reciprocals of logarithms of certain multiplicative functions. **80g:10043**

Diamond, Harold G. (*with* Erdős, Paul) A measure of the nonmonotonicity of the Euler phi function. **80e:10035**

Erdős, Paul *See* **Diamond, Harold G., 80e:10035**

Fischer, Karl-Heinz Eine Bemerkung zur Verteilung der pythagoräischen Zahlentripel. (English summary) **80m:10034**

Golubeva, E. P. The asymptotic behavior of the number of representations of large numbers by certain ternary positive quadratic forms. (Russian) **80d:10066**

Hall, R. R. The propinquity of divisors. **80e:10036**

Hazlewood, D. G. Gaussian integers with small prime factors. **80h:10050**

Hoppner, E. Über die Anzahl der natürlichen Zahlen n kleiner oder gleich x, für die jede Gruppe der Ordnung n auflösbar ist. **80m:10035**

Ismoilov, D. Summation of the number of solutions of a quadratic congruence. (Russian. Tajiki summary) **80a:10062**

Asymptotics of the representation of numbers as the difference of two products. (Russian. Tajiki summary) **80j:10048**

Ivić, Aleksandar A convolution theorem with applications to some divisor functions. **80f:10054**

See also **De Koninck, Jean-Marie, 80g:10043**

Kanemitsu, Shigeru On some sums involving Farey fractions. **80b:10062**

Langmann, Klaus Eine endliche Formel für die Anzahl der Teiler von n. (English summary) **80g:10044**

Lucht, Lutz (*with* Tuttas, F.) Mean-values of multiplicative functions and natural boundaries of power series with multiplicative coefficients. **80d:10067**

Mittelwerte zahlentheoretischer Funktionen und lineare Kongruenzsysteme. **80d:10068**

Mercier, Armel Fonctions additives dont l'ordre moyen est $a \log\log n$. **80h:10051**

Nicolas, Jean-Louis Sur les entiers N pour lesquels il y a beaucoup de groupes abéliens d'ordre N. (English summary) **80b:10063**

Parson, L. Alayne (*with* Tull, Jack) Asymptotic behavior of multiplicative functions. **80f:10055**

Radoux, Christian Divisibilité de $\sigma_k(n)$ par un nombre premier. **80b:10064**

Redmond, Donald M. Mean value theorems for a class of Dirichlet series. **80b:10065**

An asymptotic formula in the theory of numbers. III. **80h:10052**

Subbarao, M. V. (*with* Suryanarayana, D.) Sums of the divisor and unitary divisor functions. **80d:10069**

Subrahmanyam, P. *See* **Suryanarayana, D., 80f:10062**

Suryanarayana, D. On a paper of S. Chowla and H. Walum: "On the divisor problem" (Proceedings of Symposia on Pure Mathematics, Vol. VIII, pp. 138–143, Amer. Math. Soc., Providence, R.I., 1965). **80a:10063**

(*with* Subrahmanyam, P.) The maximal k-free divisor of m which is prime to n. II. **80f:10062**

See also **Subbarao, M. V., 80d:10069**

Tull, Jack *See* **Parson, L. Alayne, 80f:10055**

Tuttas, F. *See* **Lucht, Lutz, 80d:10067**

(Walum, H.) *See* **Suryanarayana, D., 80a:10063**

Warlimont, Richard Eine Bemerkung über quadratfreie Zahlen $\equiv 1 \pmod{k}$. (English summary) **80d:10070**

Secondary classifications:

de Bruijn, N. G. An asymptotic problem on iterated functions. **(80j:41049)**

Elliott, P. D. T. A. Sums and differences of additive arithmetic functions in mean square. **(80f:10071)**

Erdős, Paul (*with* Penney, D. E.; Pomerance, Carl) On a class of relatively prime sequences. **(80a:10059)**

Grosjean, C. C. Disproving a conjecture about an asymptotic formula of Ramanujan involving the divisor sums. **(80f:10007)**

Grosswald, Emil (*with* Hagis, Peter, Jr.) Arithmetic progressions consisting only of primes. **(80k:10054)**

Hagis, Peter, Jr. *See* **Grosswald, Emil, (80k:10054)**

Imrich, Wilfried On the number of subgroups of given index in $SL_2(Z)$. **(80c:20062)**

Kanemitsu, Shigeru A note on the general divisor problem. **(80c:12022)**

Kátai, Imre On additive functions. **(80b:10005)**

Kopetzky, H. G. (*with* Schwarz, W.) Two conjectures of B. R. Santos concerning totitives. **(80f:10009)**

Maastavičius, E. Sums of multiplicative functions and limit theorems in probabilistic number theory. I. (Russian. Lithuanian and English summaries) **(80k:10049)**

Nicolas, Jean-Louis Répartitions des nombres largement composés. (English summary) **(80j:10006a)**

Répartition des nombres largement composés. **(80j:10006b)**

Odoni, R. W. K. Representations of algebraic integers by binary quadratic forms and norm forms from full modules of extension fields. **(80h:12011)**

Penney, D. E. *See* **Erdős, Paul; et al., (80a:10059)**

Pomerance, Carl *See* **Erdős, Paul; et al., (80a:10059)**

Porubský, Štefan On theorems of Niven and Dressler. (Russian summary) **(80h:10065)**

Schwarz, W. *See* **Kopetzky, H. G., (80f:10009)**

Schwarz, Wolfgang Some applications of Elliott's mean-value theorem. **(80m:10040)**

Segal, S. L. A second note on Ingham's summation method. **(80g:40013)**

Székely, Gábor (*with* Tusnády, Gábor) Generalized Fibonacci numbers and the number of "pure heads". (Hungarian. English summary) **(80j:10016)**

Tusnády, Gábor *See* **Székely, Gábor, (80j:10016)**

10H26 Asymptotic results on counting functions for algebraic and topological structures

Ridley, J. N. (*with* Sears, D. B.) Asymptotic and exact analytic formulae for enumerating modules. **80g:10045**

Sears, D. B. *See* **Ridley, J. N., 80g:10045**

Secondary classifications:

De Koninck, Jean-Marie (*with* Ivić, Aleksandar) An asymptotic formula for reciprocals of logarithms of certain multiplicative functions. **(80g:10043)**

Ivić, Aleksandar *See* **De Koninck, Jean-Marie, (80g:10043)**

Smith, Robert A. On n-dimensional Kloosterman sums. **(80e:10033)**

10H30 Sieves, upper and lower estimates

Friedlander, John (*with* Iwaniec, Henryk) On Bombieri's asymptotic sieve. **80j:10049**

Graham, S. An asymptotic estimate related to Selberg's sieve. **80f:10056**

Halberstam, H. (*with* Richert, H.-E.) On a result of R. R. Hall. **80j:10050**

Iwaniec, Henryk *See* **Friedlander, John, 80j:10049**

Long, Rui Lin The weighted large sieve inequalities on locally compact abelian groups. **80f:10057**

Richert, H.-E. *See* **Halberstam, H., 80j:10050**

Secondary classifications:

Chen, Jing Run On the Goldbach's problem and the sieve methods. **(80b:10069)**

Èl'natanov, B. A. Development of the sieve method from Eratosthenes to Euler. (Russian. Tajiki summary) **(80m:01001)**

Foster, Dorothy (*with* Williams, David) The Hawkins sieve and Brownian motion. **(80b:60103)**

Johnson, David Mean values of Hecke L-functions. **(80g:10040)**

Motohashi, Yoichi ★Goldbach conjecture. (Japanese) **(80j:10055)**

Williams, David *See* **Foster, Dorothy, (80b:60103)**

Wooldridge, Kent Values taken many times by Euler's phi-function. **(80g:10008)**

10H32 Applications of sieve methods

Chen, Jing Run On the representation of a large even integer as the sum of a prime and the product of at most two primes. II. **80e:10037**

Iwaniec, Henryk On the problem of Jacobsthal. **80k:10053**

Secondary classifications:

Fomenko, O. M. The distribution of numbers with a fixed number of different prime divisors. (Russian) **(80h:10049)**

Iwaniec, Henryk (*with* Jutila, Matti) Primes in short intervals. **(80j:10047)**

Jutila, Matti *See* **Iwaniec, Henryk, (80j:10047)**

Shields, Patrick Representation of integers as a sum of two h-th powers of primes. **(80g:10047)**

Wagstaff, Samuel S., Jr. The least prime in an arithmetic progression with prime difference. **(80c:10044)**

10H35 Distribution of residue classes (primitive roots, power residues, etc.)

Kolesnik, G. (*with* Straus, E. G.) On the first occurrence of values of a character. **80c:10045**

Šparlinskiĭ, I. E. Distribution of nonresidues and primitive roots in recurrent sequences. (Russian) **80b:10066**

Straus, E. G. *See* **Kolesnik, G., 80c:10045**

Secondary classifications:

Borel, Jean-Pierre Nombres premiers généralisés et équirépartition modulo 1. **(80m:10028)**

10H40 Generalized primes and integers

Bauermeister, Hanns Funktionen mit formalem Eulerprodukt. (English summary) **80b:10067**

Gretton, Harry (*with* Jukes, Ken) Tauberian constants connected with the prime number theorem. II. Computational aspects. **80a:10064**

Horadam, E. M. Solved, semi-solved, and unsolved problems in generalized integers: a survey. **80c:10046**

Isaacs, Rufus The distribution of primes in a special ring of integers. **80h:10054**

Jukes, Ken *See* **Gretton, Harry, 80a:10064**

Müller, Helmut Berichtigung zu der Arbeit: "Zur Gleichverteilung von Beurlingschen Zahlen" [Abh. Math. Sem. Univ. Hamburg. 43 (1975), 186–191; MR 51 #12754]. **80i:10063**

Porubský, Štefan On the density of certain sets in arithmetical semigroups. **80c:10047**

10H45 Almost-periodic number-theoretic functions [See also 10K35.]

10H99 None of the above, but in this section

Gramain, François Fonctions entières arithmétiques. **80b:10068**

Hooley, Christopher On a new technique and its applications to the theory of numbers. **80h:10055**

Lucht, Lutz (*with* Wolke, Dieter) Trigonometrische Reihen über multiplikativen Zahlenmengen. II. **80j:10051**

Mittelwerte multiplikativer Funktionen auf Linearformen. **80j:10052**

Ramachandra, K. Some remarks on a theorem of Montgomery and Vaughan. **80j:10053**

Wolke, Dieter *See* **Lucht, Lutz, 80j:10051**

10Jxx Additive theory

10J05 Sums of squares

Bohman, Jan (*with* Fröberg, Carl-Erik; Riesel, Hans) Partitions in squares. **80k:10043**
Fröberg, Carl-Erik *See* **Bohman, Jan; et al., 80k:10043**
Riesel, Hans *See* **Bohman, Jan; et al., 80k:10043**
Walker, Peter L. On the partial fraction expansion for $\theta(x)$. **80k:10044**

Secondary classifications:

Allouche, Jean-Paul ★Vibrations de classe $C^{1/2}$ des tores plats T^q et théorie des nombres. **(80b:35092)**
Bröcker, Ludwig Über die Pythagoraszahl eines Körpers. **(80a:12014)**

10J06 Sums of higher powers

Bredikhin, B. M. (*with* Grišina, T. I.) Elementary estimation of $G(n)$ in Waring's problem. (Russian) **80a:10065**
Calderón García, Catalina On a generalization of a theorem of Linnik. (Spanish) **80i:10064**
Grišina, T. I. *See* **Bredikhin, B. M., 80a:10065**

Secondary classifications:

Hooley, Christopher On a new technique and its applications to the theory of numbers. **(80h:10055)**

10J10 Applications of Hardy-Littlewood method [See also 10B35.]

Balasubramanian, R. *See* **Mozzochi, C. J., 80m:10036**
Cook, Roger On sums of powers of integers. **80j:10054**
Mozzochi, C. J. (*with* Balasubramanian, R.) Analytic sufficiency conditions for Goldbach's conjecture. **80m:10036**
Richmond, L. Bruce (*with* Szekeres, George) The Taylor coefficients of certain infinite products. **80g:10046**
Szekeres, George Major arcs in the four cubes problem. **80a:10066**
See also **Richmond, L. Bruce, 80g:10046**

Secondary classifications:

Babenko, K. I. The asymptotic behavior of the Dirichlet kernel of spherical means of multiple Fourier series. (Russian) **(80c:10041)**
Evans, Ronald J. An asymptotic formula for a sum of products of powers. **(80e:10017)**
Niederreiter, Harald Ergodic sequences of measures and a problem in additive number theory. **(80e:10038)**
Sárközy, András On difference sets of sequences of integers. III. **(80j:10062b)**
On difference sets of sequences of integers. II. **(80j:10062a)**
Schmidt, Wolfgang M. Small zeros of additive forms in many variables. **(80c:10019)**

10J15 Additive questions involving primes

Chen, Jing Run On the Goldbach's problem and the sieve methods. **80b:10069**
Fainleib, A. S. (*with* Orazov, M. B.) Binary additive problems with an exponential function. (Russian. Lithuanian and English summaries) **80b:10070**
Klimov, N. I. A new estimate of the absolute constant in the Goldbach-Šnirel'man problem. (Russian) **80a:10067**
Motohashi, Yoichi ★Goldbach conjecture. (Japanese) **80j:10055**
Orazov, M. B. *See* **Fainleib, A. S., 80b:10070**
Poljakov, I. V. Representation of numbers in the form of sums of a prime number and the square of an integer. (Russian) **80k:10045**
Porubský, Štefan Sums of prime powers. **80i:10065**
Shields, Patrick Representation of integers as a sum of two h-th powers of primes. **80g:10047**
Zwillinger, Dan A Goldbach conjecture using twin primes. **80b:10071**

Secondary classifications:

Balasubramanian, R. *See* **Mozzochi, C. J., (80m:10036)**
Chen, Jing Run On the representation of a large even integer as the sum of a prime and the product of at most two primes. II. **(80e:10037)**
Lachaud, Gilles Variations sur un thème de Mahler. **(80h:10057)**
Liu, Ming Chit Approximation by a sum of polynomials of different degrees involving primes. **(80k:10028)**
Mozzochi, C. J. (*with* Balasubramanian, R.) Analytic sufficiency conditions for Goldbach's conjecture. **(80m:10036)**
Ryan, William Gödel's second incompleteness theorem for general recursive arithmetic. **(80b:03092)**
Toffin, Philippe Un exemple d'utilisation de la méthode de Vinogradov. **(80k:10035)**

10J20 Analytic work on partitions [See also 10A45.]

Erdős, Paul (*with* Richmond, L. Bruce) Partitions into summands of the form $[m\alpha]$. **80g:10048**
Mitsui, Takayoshi On the partition problem in an algebraic number field. **80d:10071**
Reich, Daniel On certain polynomials of Gaussian type. **80g:10049**
Richmond, L. Bruce *See* **Erdős, Paul, 80g:10048**
Šalát, Tibor On the sums and products of consecutive elements from a sequence. **80d:10072**

Secondary classifications:

Cattapan, G. (*with* Vanzani, V.) Distribution properties of the channel interactions in N-body scattering and applications. (Italian and Russian summaries) **(80i:81048)**
Erdős, Paul (*with* Loxton, J. H.) Some problems in partitio numerorum. **(80k:10021)**
Loxton, J. H. *See* **Erdős, Paul, (80k:10021)**
Nicolas, Jean-Louis Sur les entiers N pour lesquels il y a beaucoup de groupes abéliens d'ordre N. (English summary) **(80b:10063)**
Vanzani, V. *See* **Cattapan, G., (80i:81048)**

10J25 Lattice points in large regions

Chaix, Henri Points frontières de certains compacts convexes appartenant à un réseau, dans $\mathbf{R}^2$ et $\mathbf{R}^3$. **80h:10056**
Nowak, Werner-Georg Gitterpunkte in speziellen nicht-konvexen Bereichen. **80j:10056**
Podsypanin, E. V. The number of integer points in an elliptic region (a note on a theorem of A. V. Malyšev). (Russian) **80g:10050**
Tarnopolska-Weiss, Marysia On the number of lattice points in a compact n-dimensional polyhedron. **80c:10048**

Secondary classifications:

Colin de Verdière, Yves Nombre de points entiers dans une famille homothétique de domaines de $\mathbf{R}^n$. **(80h:58047)**
Donnelly, Harold Asymptotic expansions for the compact quotients of properly discontinuous group actions. **(80h:58049)**
Guillemin, Victor (*with* Melrose, Richard) The Poisson summation formula for manifolds with boundary. **(80j:58066)**
Günther, Paul Problème de réseaux dans les espaces hyperboliques. (English summary) **(80b:58065)**
Hammer, Joseph Lattice points and area-diameter relation. **(80d:10044)**
Ikeda, Akira (*with* Yamamoto, Yoshihiko) On the spectra of 3-dimensional lens spaces. **(80e:58042)**
Lazutkin, V. F. An estimate of the gap width in the spectrum of a Laplace operator for a plane convex domain. (Russian) **(80d:35119)**
Melrose, Richard *See* **Guillemin, Victor, (80j:58066)**
Šestopal, A. F. A spectral problem for the Laplace operator in domains of mirror-symmetric polyhedra. (Russian) **(80e:35049)**
Wolfe, William The asymptotic distribution of lattice points in hyperbolic space. **(80h:58055)**
Yamamoto, Yoshihiko *See* **Ikeda, Akira, (80e:58042)**

10J99 None of the above, but in this section

Lachaud, Gilles Variations sur un thème de Mahler. **80h:10057**
Newman, Donald J. A simplified proof of the Erdős-Fuchs theorem. **80f:10058**
Rickert, Udo Über Summen in abelschen Gruppen. **80f:10059**
Small, Charles Sums of powers in arithmetic progressions. **80f:10060**

Secondary classifications:

Cusick, T. W. (*with* Kolesnik, G.) Turán's second theorem on sums of powers of complex numbers. **(80i:10061)**
Erdős, Paul Some unconventional problems in number theory. **(80b:10002)**
Kolesnik, G. *See* **Cusick, T. W., (80i:10061)**
Newman, Donald J. (*with* Slater, Morton) Waring's problem for the ring of polynomials. **(80m:10016)**
Slater, Morton *See* **Newman, Donald J., (80m:10016)**

10Kxx Probabilistic theory; measure, dimension, etc.

10K05 Distribution modulo one [See also 10F40.]

Borel, Jean-Pierre Équirépartition modulo 1 et semi-groupes additifs. (English summary) **80a:10068**
Coquet, Jean Fonctions q-multiplicatives. Application aux nombres de Pisot-Vijayaraghavan. **80g:10051**
Sur certaines suites pseudo-aléatoires. **80g:10052**
Dupain, Yves Intervalles à restes majorés pour la suite $\{n\alpha\}$. II. **80a:10069**
Discrépance de la suite $(\{n\alpha\})$, $\alpha = (1+\sqrt{5})/2$. (English summary) **80f:10061**
Fujii, Akio On the uniformity of the distribution of the zeros of the Riemann zeta function. **80g:10053**
Grandet-Hugot, Marthe Quelques notions sur l'équirépartition dans les groupes abéliens compacts et localement compacts. **80m:10037**
Hlawka, Edmund ★Theorie der Gleichverteilung. **80j:10057**
Kahane, Jean-Pierre Sur une note de Charles Pisot. **80j:10058**
Kamae, Teturo (*with* Mendès France, Michel) van der Corput's difference theorem. **80a:10070**
Levin, M. B. (*with* Šparlinskiĭ, I. E.) Uniform distribution of fractional parts of recurrent sequences. (Russian) **80k:10046**
Liardet, Pierre Répartition et ergodicité. **80d:10073**
Losert, Viktor (*with* Rindler, Harald) Teilfolgen gleichverteilter Folgen. **80a:10071**
On the existence of uniformly distributed sequences in compact topological spaces. I. **80f:10062a**
On the existence of uniformly distributed sequeness in compact topological spaces. II. **80f:10062b**
de Mathan, Bernard Sur un problème de densité modulo 1. (English summary) **80a:10072**
Mendès France, Michel Les ensembles de van der Corput. **80d:10074**
See also **Kamae, Teturo, 80a:10070**

Niederreiter, Harald Ergodic sequences of measures and a problem in additive number theory. **80e:10038**
Existence of good lattice points in the sense of Hlawka. **80e:10039**
(*with* Shiue, Jau Shyong) Uniform distribution of sequences in rings of integral matrices. **80h:10058**
O'Hara, Patrick J. (*with* Rodriguez, Rene S.) Polynomials with zeros uniformly distributed on the unit circle. **80b:10072**
(Pisot, Charles) *See* **Kahane, Jean-Pierre, 80j:10058**
Pollington, A. D. On the density of sequence $\{n_k\xi\}$. **80i:10066**
Rindler, Harald Eine Charakterisierung gleichverteilter Folgen. **80i:10067**
See also **Losert, Viktor, 80a:10071**
Rodriguez, Rene S. *See* **O'Hara, Patrick J., 80b:10072**
Scholssengeier, Johannes Eine neue Diskrepanz für gewisse Primzahlfolgen. **80m:10038**
The connection between the zeros of the ζ-function and sequences $(g(p))$, p prime, mod 1. **80g:10054**
Shapiro, Leonard Regularities of distribution. **80m:10039**
Shi, Shu Zhong Optimal uniform distributions generated by M-sequences. (Chinese) **80i:10068**
Shiue, Jau Shyong *See* **Niederreiter, Harald, 80h:10058**
Šparlinskiĭ, I. E. *See* **Levin, M. B., 80k:10046**
Sprindžuk, Vladimir G. (*with* Vil'činskiĭ, V. T.) Diophantine approximations on random varieties. (Russian. English summary) **80i:10069**
Taschner, Rudolf J. Der Differenzensatz von van der Corput und gleichverteilte Funktionen. **80g:10055**
Kriterien in der Theorie der Gleichverteilung. (English summary) **80e:10040**
Tichy, Robert F. Ein Analogon zum Satz von Koksma in Quaternionen. **80j:10059**
Diskrepanz von Ketten. (English summary) **80j:10060**
Vaaler, Jeffrey D. Boundary behavior of Laplace-Stieltjes transforms with applications to uniformly distributed sequences. **80f:10063**
Vil'činskiĭ, V. T. *See* **Sprindžuk, Vladimir G., 80i:10069**

Secondary classifications:

Bertrand, Anne Répartition modulo 1 et développement en base θ. (English summary) **(80f:12001)**
Griso, Georges Équirépartition et zéros de la fonction zêta (d'après E. Hlawka). **(80b:10057)**
Hall, R. R. A new definition of the density of an integer sequence. **(80a:10075)**
Hua, Luo Geng (*with* Wang, Yuan) Uniform distribution and numerical analysis. I. Number-theoretic methods. (Chinese) **(80i:10044a)**
(*with* Wang, Yuan) Uniform distribution and numerical analysis. II. Number-theoretic method. (Chinese) **(80i:10044b)**
Losert, Viktor (*with* Rindler, Harald) Uniform distribution and the mean ergodic theorem. **(80f:22001)**
Maxones, Walter (*with* Rindler, Harald) Asymptotisch gleichverteilte Massfolgen in Gruppen vom Heisenberg-Typ. **(80e:22005)**
(*with* Rindler, Harald) Asymptotisch gleichverteilte Netze von Wahrscheinlichkeitsmassen auf lokalkompakten Gruppen. **(80m:43001)**
Rindler, Harald *See* **Maxones, Walter, (80e:22005); Losert, Viktor, (80f:22001)** *and* **Maxones, Walter, (80m:43001)**
Schmidt, Klaus A cylinder flow arising from irregularity of distribution. **(80e:28029)**
Smith, Robert A. On n-dimensional Kloosterman sums. **(80e:10033)**
Wang, Yuan *See* **Hua, Luo Geng, (80i:10044a)** *and* **Hua, Luo Geng, (80i:10044b)**

10K10 Algorithms and expansions [See also 10A30, 10F20.]

Derrida, B. (*with* Gervois, A.; Pomeau, Y.) Iteration of endomorphisms on the real axis and representation of numbers. (French summary) **80g:10056**
Gervois, A. *See* **Derrida, B.; et al., 80g:10056**
Iosifescu, Marius Recent advances in the metric theory of continued fractions. **80h:10059**
Kamae, Teturo Sum of digits to different bases and mutual singularity of their spectral measures. **80b:10073**
Mendès France, Michel Indépendance statistique, somme des chiffres, mesure spectrale. **80i:10070**
Moskvin, D. A. (*with* Postnikov, A. G.) A local limit theorem for the distribution of fractional parts of an exponential function. (Russian. English summary) **80b:10074**
Newman, Donald J. (*with* Richards, Ian) Finite measures designed for accuracy on arithmetic progressions. **80c:10049**
Pomeau, Y. *See* **Derrida, B.; et al., 80g:10056**
Postnikov, A. G. *See* **Moskvin, D. A., 80b:10074**
Richards, Ian *See* **Newman, Donald J., 80c:10049**
Rieger, G. J. Ein Gauss-Kusmin-Lévy-Satz für die singulären Kettenbrüche im Sinn von Hurwitz. **80h:10060**
Šopov, Pet"r Sur la distribution de la mesure dans la théorie métrique des fractions continues. **80j:10061**
Spătaru, Aurel Stochastic independence of the digits of an f-expansion. (Romanian. English summary) **80h:10061**
Dichotomies for probability measures induced by $(f_1, f_2, \ldots)$-expansions. **80b:10075**

Secondary classifications:

Diderrich, George T. Continued fractions and the fundamental equation of information. **(80j:39009)**
Gerl, Peter Eine asymptotische Auswertung von Faltungspotenzen in gewissen Gruppen. **(80d:60018)**
Heppner, E. Eine Bemerkung zum Hasse-Syracuse-Algorithmus. **(80d:10007)**
Krupka, Z. I. Representation of the solution of a system of linear algebraic equations by means of continued fractions with positive terms. (Russian. English summary) **(80m:10021)**
Mehta, M. L. On f-representation of real numbers. **(80k:10005)**
Nagasaka, Kenji On the Hausdorff dimension of sets missing statistical laws. (Japanese. English summary) **(80k:10051)**
Odlyzko, Andrew M. Nonnegative digit sets in positional number systems. **(80m:10004)**
Thaler, Maximilian σ-endliche invariante Masse für die Engelschen Reihen. **(80j:28028)**

10K15 Diophantine approximation [See also 10Fxx.]

Bernik, V. I. The Baker-Schmidt conjecture. (Russian. English summary) **80k:10047**
Bovey, J. D. (*with* Dodson, M. M.) The fractional dimension of sets whose simultaneous rational approximations have errors with a small product. **80a:10073**
Dodson, M. M. *See* **Bovey, J. D., 80a:10073**
Mel'ničuk, Ju. V. Diophantine approximation of curves and Hausdorff dimension. (Russian. English summary) **80b:10076**
(Newman, Donald J.) *See* **Sprindžuk, Vladimir G., 80k:10048**
(Silverman, Richard A.) *See* **Sprindžuk, Vladimir G., 80k:10048**
Sprindžuk, Vladimir G. ★Metric theory of Diophantine approximations. **80k:10048**

Secondary classifications:

Baker, R. C. On numbers with many rational approximations. **(80f:10038)**
Niederreiter, Harald Quasi-Monte Carlo methods and pseudo-random numbers. **(80d:65016)**
Schlickewei, Hans Peter On indefinite diagonal forms in many variables. **(80f:10041)**
Sprindžuk, Vladimir G. (*with* Vil'činskiĭ, V. T.) Diophantine approximations on random varieties. (Russian. English summary) **(80i:10069)**
Vil'činskiĭ, V. T. *See* **Sprindžuk, Vladimir G., (80i:10069)**

10K20 Arithmetic functions

Babu, Gutti Jogesh ★Probabilistic methods in the theory of arithmetic functions. **80g:10057**
Collison, Joseph E. Central moments for arithmetic functions. **80b:10077**
Elliott, P. D. T. A. Sums and differences of additive arithmetic functions in mean square. **80i:10071**
Kubilius, J. Probability methods in number theory. (Bulgarian) **80d:10075**
Manstavičius, E. Sums of multiplicative functions and limit theorems in probabilistic number theory. I. (Russian. Lithuanian and English summaries) **80k:10049**
Norton, Karl K. On the number of restricted prime factors of an integer. II. **80i:10072**
Paul, E. M. On the distribution of values of additive arithmetical functions. **80i:10073**
Schwarz, Wolfgang Some applications of Elliott's mean-value theorem. **80m:10040**
Timofeev, N. M. (*with* Usmanov, H. H.) Additive functions and limit theorems in function spaces. (Russian. Tajiki summary) **80k:10050**
Tuljaganova, M. I. A generalization of a theorem of Halász. (Russian. Uzbek summary) **80c:10050**
Usmanov, H. H. *See* **Timofeev, N. M., 80k:10050**
(V"ndev, Dimit"r L.) *See* **Kubilius, J., 80d:10075**

Secondary classifications:

Kátai, Imre On additive functions. **(80b:10005)**
Lovász, László (*with* Vesztergombi, K.) Restricted permutations and Stirling numbers. **(80c:05007)**
Lucht, Lutz Mittelwerte multiplikativer Funktionen auf Linearformen. **(80j:10052)**
Roesler, Friedrich Über die Verteilung der Primzahlen in Folgen der Form $[f(n+x)]$. **(80i:10059)**
Vesztergombi, K. *See* **Lovász, László, (80c:05007)**

10K25 Normal numbers

Levin, M. B. Absolutely normal numbers. (Russian. French summary) **80d:10076**
Nagasaka, Kenji On the Hausdorff dimension of sets missing statistical laws. (Japanese. English summary) **80k:10051**

10K30 Irregularities of distribution

Baker, R. C. On irregularities of distribution. **80f:10064**
Béjian, Robert (*with* Faure, Henri) Discrépance de la suite de Van der Corput. **80b:10078**
Faure, Henri *See* **Béjian, Robert, 80b:10078**
Srinivasan, Seshadri On two-dimensional Hammersley's sequences. **80f:10065**

Secondary classifications:

Scholssengeier, Johannes Zur Metrik der Diskrepanz. (English summary) **(80k:62034)**
Shapiro, Leonard Regularities of distribution. **(80m:10039)**

10K35 Harmonic analysis and almost periodicity [See also 10H45.]

Secondary classifications:

Bauermeister, Hanns Funktionen mit formalem Eulerprodukt. (English summary) **(80b:10067)**
Mendès France, Michel Indépendance statistique, somme des chiffres, mesure spectrale. **(80i:10070)**

10K40 Non-Archimedean theory

10K50 Measure; Hausdorff dimension

10K99 None of the above, but in this section

Secondary classifications:

Dewdney, C. *See* **Philippidis, C.; et al., (80j:81045)**
(Gerl, Peter) *See* **Maxones, Walter; et al., (80g:22005)**
Hiley, B. J. *See* **Philippidis, C.; et al., (80j:81045)**
Maxones, Walter (*with* Rindler, Harald) Bemerkungen zu: "Gleichverteilung auf lokalkompakten Gruppen" [Math. Nachr. **71** (1976), 249–260; MR **53** #6231] von P. Gerl. **(80g:22005)**
Miles, G. (*with* Thomas, R. K.) On the polynomial uniformity of translations of the n-torus. **(80c:28017)**
Neuwirth, J. H. Ergodicity of some mappings of the circle and the line. **(80e:28031)**
Philippidis, C. (*with* Dewdney, C.; Hiley, B. J.) Quantum interference and the quantum potential. (Italian and Russian summaries) **(80j:81045)**
Rindler, Harald *See* **Maxones, Walter, (80g:22005)**
Thomas, R. K. *See* **Miles, G., (80c:28017)**

10Lxx Sequences of integers

Secondary classifications:

Erdős, Paul Combinatorial problems in geometry and number theory. **(80i:05001)**

10L02 Density of sum sets, analogues and generalizations

Erdős, Paul (*with* Saffari, B.; Vaughan, R. C.) On the asymptotic density of sets of integers. II. **80i:10074**
Saffari, B. *See* **Erdős, Paul; et al., 80i:10074**
Vaughan, R. C. *See* **Erdős, Paul; et al., 80i:10074**

Secondary classifications:

Chen, Jing Run On the representation of a large even integer as the sum of a prime and the product of at most two primes. II. **(80e:10037)**
Kamae, Teturo (*with* Mendès France, Michel) van der Corput's difference theorem. **(80a:10070)**
Mendès France, Michel *See* **Kamae, Teturo, (80a:10070)**

10L05 Addition of sequences, additive bases [See also 05B10.]

Desbouillers, Jean-Marc Quelques aspects de la théorie additive des nombres. **80d:10077**
Erdős, Paul (*with* Nathanson, Melvyn B.) Bases and nonbases of squarefree integers. **80h:10062**
Hoffman, D. G. (*with* Klarner, David A.) Sets of integers closed under affine operators —the closure of finite sets. **80i:10075**
Klarner, David A. *See* **Hoffman, D. G., 80i:10075**
Mrose, Arnulf Untere Schranken für die Reichweiten von Extremalbasen fester Ordnung. **80g:10058**
Nathanson, Melvyn B. *See* **Erdős, Paul, 80h:10062**
Ruzsa, I. Z. On the additive completion of linear recurrence sequences. **80i:10076**
Sárközy, András On difference sets of sequences of integers. III. **80j:10062b**
On difference sets of sequences of integers. II. **80j:10062a**
Stewart, Cameron L. On difference sets of sets of integers. **80k:10052**
Woo, Norman A note on basic M-tuples. **80g:10059**
Yap, H. P. A note on the sets $A+A$ and $A-A$. **80c:10051**

Secondary classifications:

Xu, Cheng Xu Construction of orthogonal arrays $L_{2p^n}(p^{1+2[\frac{n}{2}]})$ with odd prime p. (Chinese) **(80j:05026)**

10L10 Special sequences (density, multiplicative, additive and other properties)

Bero, Peter On sets of values of some arithmetical functions. (Slovak and Russian summaries) **80j:10063**
Dabousi, Hédi On the density of direct factors of the set of positive integers. **80f:10066**
Erdős, Paul (*with* Odlyzko, Andrew M.) On the density of odd integers of the form $(p-1)2^{-n}$ and related questions. **80i:10077**
Gerver, Joseph L. (*with* Ramsey, L. Thomas) Sets of integers with nonlong arithmetic progressions generated by the greedy algorithm. **80k:10053**
Gioia, A. A. (*with* Subbarao, M. V.) The Scholz-Brauer problem in addition chains. II. **80i:10078**
Guaraldo, Rosalind On the density of the image sets of certain arithmetic functions. **80a:10074**
Hall, R. R. A new definition of the density of an integer sequence. **80a:10075**
Kátai, Imre Divisibility properties of arithmetical functions. **80i:10079**
Kuipers, L. Einige Bemerkungen zu einer Arbeit von G. J. Rieger. **80h:10063**
Murty, G. Sri Rama Chandra *See* **Sitaramachandra Rao, R., 80g:10061**
Odlyzko, Andrew M. *See* **Erdős, Paul, 80i:10077**
Ono, Hideo A study of the limits of random sequences. (Japanese) **80h:10064**
Perubský, Štefan On theorems of Niven and Dressler. (Russian summary) **80h:10065**
Ramsey, L. Thomas *See* **Gerver, Joseph L., 80k:10053**
Sattler, R. New results on $(0, 2a)$-primitive sequences, a odd. **80g:10060**
Sitaramachandra Rao, R. (*with* Murty, G. Sri Rama Chandra) On a theorem of Niven. **80g:10061**
Subbarao, M. V. *See* **Gioia, A. A., 80i:10078**
Terras, Riho On the existence of a density. **80a:10066**

Secondary classifications:

Cook, Roger On sums of powers of integers. **(80j:10054)**
Coquet, Jean Sur certaines suites pseudo-aléatoires. **(80g:10052)**
Karpovsky, Mark G. (*with* Milman, V. D.) Coordinate density of sets of vectors. **(80m:05004)**
Lord, Graham (*with* Morin, Herve G.) Degeneracy of transformed complete sequences. **(80m:10006)**
de Mathan, Bernard Sur un problème de densité modulo 1. (English summary) **(80a:10072)**
Milman, V. D. *See* **Karpovsky, Mark G., (80m:05004)**
Morin, Herve G. *See* **Lord, Graham, (80m:10006)**
O'Hara, Patrick J. (*with* Rodriguez, Rene S.) Polynomials with zeros uniformly distributed on the unit circle. **(80b:10072)**
Pollington, A. D. On the density of sequence $\{n_k\xi\}$. **(80i:10066)**
Rodriguez, Rene S. *See* **O'Hara, Patrick J., (80b:10072)**

10L15 Representation functions

Secondary classifications:

Šalát, Tibor On the sums and products of consecutive elements from a sequence. **(80d:10072)**

10L20 Arithmetic progressions [See also 10H20.]

Grosswald, Emil (*with* Hagis, Peter, Jr.) Arithmetic progressions consisting only of primes. **80k:10054**
Hagis, Peter, Jr. *See* **Grosswald, Emil, 80k:10054**
Yap, H. P. A generalization of a result of Mann and Olsen. **80d:10078**

Secondary classifications:

Newman, Donald J. (*with* Richards, Ian) Finite measures designed for accuracy on arithmetic progressions. **(80c:10049)**
Richards, Ian *See* **Newman, Donald J., (80c:10049)**
Wagstaff, Samuel S., Jr. Some questions about arithmetic progressions. **(80j:10020)**

10L99 None of the above, but in this section

10Mxx Rational arithmetic of algebraic objects

10M05 Polynomials [See also 13F20.]

Grosswald, Emil Errata:"Reducible rational fractions of the type of Gaussian polynomials with only non-negative coefficients" (Canad. Math. Bull. **21** (1978), no. 1, 21–30). **80b:10079**

Secondary classifications:

Brenner, Andrew (*with* Morton, Patrick) Polynomial relations in characteristic p. **(80a:12025)**
Morton, Patrick *See* **Brenner, Andrew, (80a:12025)**
Vîry, Guy Factorisation des polynômes à plusieurs variables à coefficients entiers. **(80g:94056)**

10M10 Valued fields [See also 12J10.]

Secondary classifications:

Moresco, Roberto Ordered groups and fields. (Italian. English summary) **(80m:06020)**

10M15 Ordered fields [See also 12J15.]

10M20 Matrices [See also 15A36.]

10M99 None of the above, but in this section

10Nxx Connections with logic

10N05 Decidability [See also 03B25.]

Britton, J. L. Integer solutions of systems of quadratic equations. **80i:10080**

Secondary classifications:

Georgieva, Nadejda An extension of the decidable class of equations considered by Goodstein and Lee. **(80b:03053)**
Gurari, Eitan M. (*with* Ibarra, Oscar H.) An NP-complete number-theoretic problem. **(80e:68107)**
Ibarra, Oscar H. *See* **Gurari, Eitan M., (80e:68107)**

10N10 Ultraproducts [See also 03C20.]

Secondary classifications:

Kiehne, Ursel Bounded products in the theory of valued fields. **(80i:12018)**

10N15 Nonstandard arithmetic [See also 03H15.]

Secondary classifications:

Lipshitz, L. Diophantine correct models of arithmetic. **(80a:03092)**
Penzin, Ju. G. The problem of twins in formal arithmetic. (Russian) **(80m:03115)**

10N99 None of the above, but in this section

12-XX ALGEBRAIC NUMBER THEORY, FIELD THEORY AND POLYNOMIALS

12-01 Elementary exposition, textbooks

Browkin, Jerzy ★Teoria ciał. (Polish) [Theory of fields] **80a:12001**
Cohn, Harvey ★A classical invitation to algebraic numbers and class fields. **80c:12001**
Felscher, Walter ★Naive Mengen und abstrakte Zahlen. II. **80m:12001**
Gaal, I. L. ★Classical Galois theory, with examples. **80g:12001**
(Taussky, Olga) *See* **Cohn, Harvey, 80c:12001**

Secondary classifications:

(Bel'skiĭ, A. A.) *See* **van der Waerden, Bartel Leendert, (80k:00002)**
Fischer, Gerd (*with* Sacher, Reinhard) ★Einführung in die Algebra. **(80c:06002)**
(Merzljakov, Ju. I.) *See* **van der Waerden, Bartel Leendert, (80k:00002)**
(Rosenlicht, Maxwell) *See* **Weil, André, (80e:10004)**
Sacher, Reinhard *See* **Fischer, Gerd, (80c:00002)**
van der Waerden, Bartel Leendert ★Алгебра. (Russian) [Algebra] **(80k:00002)**
Weil, André ★Number theory for beginners. **(80e:10004)**

12-02 Advanced exposition (research surveys, monographs, etc.)

Secondary classifications:

Ihara, Yasutaka Introduction to the work of Mr. Takuro Shintani, winner of the 6th Japan Mathematical Society Iyanaga Prize. (Japanese) **(80k:10003)**

12-03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

(Brauer, Richard Dagobert) *See* **Green, J. A., (80g:01024)** *and* **Feit, Walter, (80m:01033)**
Feit, Walter Richard D. Brauer. **(80m:01033)**
Green, J. A. Richard Dagobert Brauer. **(80g:01024)**
Mackey, George W. Harmonic analysis as the exploitation of symmetry—a historical survey. **(80j:01019)**
Bibliography:
Brauer, Richard D. *See* **Feit, Walter, (80m:01033)**
Brauer, Richard Dagobert *See* **Green, J. A., (80g:01024)**
Obituary:
Brauer, Richard D. *See* **Feit, Walter, (80m:01033)**
Brauer, Richard Dagobert *See* **Green, J. A., (80g:01024)**

12-04 Explicit machine computation and programs (not the theory of computation or programming)

Müller, Helmut A calculation of class-numbers of imaginary quadratic numberfields. **80i:12001**

Secondary classifications:

Bitnbaev, T. S. Enumeration of all imaginary quadratic fields of prime discriminant $d = -p$, $p < 1000763$ with a prescribed number of ideal classes $h(-p)$ where $h(-p)$ takes on all odd single-valued, double-valued as well as four-valued values that are contained in the limits of the table. I. (Russian) **(80e:12002)**
Buell, Duncan A. Computer computation of class groups of quadratic number fields. **(80h:12003)**
Schnorr, C.-P. Improved lower bounds on the number of multiplications/divisions which are necessary to evaluate polynomials. **(80k:68030)**
Shanks, Daniel *See* **Williams, H. C., (80g:12002)**
Williams, H. C. (*with* Shanks, Daniel) A note on class-number one in pure cubic fields. **(80g:12002)**
Winograd, S. On multiplication in algebraic extension fields. **(80e:68081)**

12-06 Proceedings, conferences, etc.

Secondary classifications:

(Borel, Armand) *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
(Casselman, W.) *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
(Delange, Hubert) *See* **Séminaire: Delange-Pisot-Poitou, (80a:10002a); Séminaire: Delange-Pisot-Poitou, (80i:10003a)** *and* **Séminaire: Delange-Pisot-Poitou, (80i:10003b)**
(Pisot, Charles) *See* **Séminaire: Delange-Pisot-Poitou, (80a:10002a); Séminaire: Delange-Pisot-Poitou, (80i:10003a)** *and* **Séminaire: Delange-Pisot-Poitou, (80i:10003b)**
(Poitou, Georges) *See* **Séminaire: Delange-Pisot-Poitou, (80a:10002a); Séminaire: Delange-Pisot-Poitou, (80i:10003a)** *and* **Séminaire: Delange-Pisot-Poitou, (80i:10003b)**
Astérisque *See* **Journées: Arithmétiques de Luminy, (80j:10003)**
Automorphic forms, representations and *L*-functions ★Automorphic forms, representations and *L*-functions. Part 1. **(80g:10002a)**
★Automorphic forms, representations, and *L*-functions. Part 2. **(80g:10002b)**
Colloque:
CNRS, Journées Arithmétiques de Luminy *See* **Journées: Arithmétiques de Luminy, (80j:10003)**
Corvallis, Ore. *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
Journées:
Arithmétiques de Luminy ★Journées Arithmétiques de Luminy. **(80j:10003)**
***L*-functions** *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
Luminy *See* **Journées: Arithmétiques de Luminy, (80j:10003)**
Number theory *See* **Séminaire: Delange-Pisot-Poitou, (80a:10002a); Séminaire: Théorie des Nombres, (80h:10004); Séminaire: Delange-Pisot-Poitou, (80i:10003a)** *and* **Séminaire: Delange-Pisot-Poitou, (80i:10003b)**
Paris *See* **Séminaire: Delange-Pisot-Poitou, (80i:10003a)** *and* **Séminaire: Delange-Pisot-Poitou, (80i:10003b)**
Proceedings of Symposia in Pure Mathematics *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**
Séminaire:
Delange-Pisot-Poitou ★Séminaire Delange-Pisot-Poitou. 18e année: 1976/1977. Théorie des nombres. Fascicule 1: Exposés 1 à 16. **(80i:10003a)**
★Séminaire Delange-Pisot-Poitou. 18e année: 1976/77. Théorie des nombres. Fascicule 2: Exposés 17 à 29 et Groupe d'étude. **(80i:10003b)**
★Séminaire Delange-Pisot-Poitou, 19e année: 1977/78. Théorie des nombres. Fascicule 1: Exposés 1 à 22. **(80a:10002a)**
Théorie des Nombres ★Séminaire de Théorie des Nombres 1977–1978. **(80h:10004)**
Summer Research Institute:
American Mathematical Society *See* **Automorphic forms, representations and *L*-functions, (80g:10002a)** *and* **Automorphic forms, representations and *L*-functions, (80g:10002b)**

12Axx Algebraic number theory: global fields {For complex multiplication, see 10D25.}

Secondary classifications:

Cohn, Harvey ★A classical invitation to algebraic numbers and class fields. **(80c:12001)**
(Taussky, Olga) *See* **Cohn, Harvey, (80c:12001)**

12A05 Analogues in number fields of elementary number theory

12A10 Characterizations of algebraic numbers and algebraic functions

Pourchet, Yves Solution du problème arithmétique du quotient de Hadamard de deux fractions rationnelles. (English summary) **80i:12002**
Stewart, Cameron L. Algebraic integers whose conjugates lie near the unit circle. (French summary) **80a:12002**

12A15 Special algebraic numbers (PV numbers, etc.)

Amara, Mohamed Sur le produit des conjugués, extérieurs au disque unité, de certains nombres algébriques. **80k:12001**
Bertin, Marie-José Étude des ensembles $\Sigma_{\theta,k}$ et de leurs ensembles dérivés: application à l'étude des ensembles dérivés de l'ensemble S des nombres de Pisot. (English summary) **80c:12002**
Bertrand, Anne Répartition modulo 1 et développement en base θ. (English summary) **80f:12001**
Boyd, David W. On the successive derived sets of the Pisot numbers. **80b:12001**
Greiter, Gebhard A simple proof for a theorem of Kronecker. **80a:12003**
Mignotte, Maurice Entiers algébriques dont les conjugués sont proches du cercle unité. **80b:12002**
Pathiaux, Martine Classification en sous familles fermées de n-uples de nombres algébriques. **80j:12001**
Tahmoudi, Faouzia Lazami Sur les nombres de $S \cap [1, 2]$. (English summary) **80c:12003**
Sur les nombres de $S \cap [1, 2]$. (English summary) **80a:12004**

Secondary classifications:

Coquet, Jean Fonctions q-multiplicatives. Application aux nombres de Pisot-Vijayaraghavan. **(80g:10051)**
Sur certaines suites pseudo-aléatoires. **(80g:10052)**
Dobrowolski, E. On a question of Lehmer and the number of irreducible factors of a polynomial. **(80i:10040)**
Kahane, Jean-Pierre Sur une note de Charles Pisot. **(80j:10058)**
Mehta, M. L. On f-representation of real numbers. **(80k:10005)**
(Pisot, Charles) *See* **Kahane, Jean-Pierre, (80j:10058)**

12A20 Polynomials (irreducibility, etc.)

Agou, Simon Irréductibilité des polynômes $f(X^{p^v} - aX^{p^r} - bX)$ sur un corps fini $\mathbf{F}_{p^s}$. **80b:12001**
Cahen, P. J. Fractions rationnelles à valeurs entières. **80e:12001**
Lawton, Wayne Asymptotic properties of roots of polynomials—preliminary report. **80f:12003**
Lo, Siu Kwong *See* **Niederreiter, Harald, 80k:12002**
Niederreiter, Harald (*with* Lo, Siu Kwong) Permutation polynomials over rings of algebraic integers. **80k:12002**

Secondary classifications:

Fried, Ervin (*with* Kollár, János) Automorphism groups of algebraic number fields. **(80d:14015)**
Golomb, Solomon W. Cyclotomic polynomials and factorization theorems. **(80e:10011)**
Kollár, János *See* **Fried, Ervin,** (80d:14015)
Winograd, S. On multiplication in algebraic extension fields. **(80e:68081)**

12A25 Quadratic fields

Bitimbaev, T. S. Enumeration of all imaginary quadratic fields of prime discriminant $d = -p$, $p \leq 1000763$ with a prescribed number of ideal classes $h(-p)$ where $h(-p)$ takes on all odd single-valued, double-valued as well as four-valued values that are contained in the limits of the table. I. (Russian) **80e:12002**
Buhr, P. A. *See* **Williams, H. C., 80e:12003**
Diaz y Diaz, Francisco ★Sur le 3-rang des corps quadratiques. **80i:12005**
(*with* Shanks, Daniel; Williams, H. C.) Quadratic fields with 3-rank equal to 4. **80i:12004**
Nakahara, Toru On real quadratic fields whose ideal class groups have a cyclic p-subgroup. **80a:12005**
Onabe, Midori On idèle class groups of imaginary quadratic fields. **80d:12001**
Podsypanin, E. V. The length of the period of a quadratic irrationality. (Russian) **80k:12002**
Shanks, Daniel *See* **Diaz y Diaz, Francisco; et al., 80i:12004**
Trinks, Wolfgang Berechnung von Einheiten nach Lagrange. **80k:12003**
Williams, H. C. (*with* Buhr, P. A.) Calculation of the regulator of $Q(\sqrt{D})$ by use of the nearest integer continued fraction algorithm. **80e:12003**
See also **Diaz y Diaz, Francisco; et al., 80i:12004**

Secondary classifications:

Blanco Martín, María Francisca (*with* Tena Ayuso, Juan) The kernel of the homomorphism $W(Q) \to W(Q(\sqrt{d}))$. (Spanish) **(80e:10021)**
Lagarias, J. C. Signatures of units and congruences (mod 4) in certain real quadratic fields. **(80e:12009)**
Lu, Hong Wen The class-number of a real quadratic field. (Chinese) **(80e:12013)**
Morikawa, Ryozo On units of real quadratic number fields. **(80i:12008)**
Müller, Helmut A calculation of class-numbers of imaginary quadratic numberfields. **(80i:12001)**
Schertz, Reinhard Teilkörper relativ abelscher Erweiterungen imaginär-quadratischer Zahlkörper, deren Klassenzahl durch Primteiler des Körpergrades teilbar ist. **(80b:12008)**
Stender, Hans-Joachim Zur Parametrisierung reell-quadratischer Zahlkörper. **(80k:12007)**
Über die Grundeinheit der reell-quadratischen Zahlkörper $Q(\sqrt{(A^2N^2 + BN + C)})$. **(80k:12008)**
Tena Ayuso, Juan *See* **Blanco Martín, María Francisca, (80e:10021)**
Woods, A. C. The Markoff spectrum of an algebraic number field. **(80b:10046)**

12A30 Cubic and quartic fields

Bloom, John R. On the invariants of some Z_l-extensions. **80i:12006**
Brown, Ezra (*with* Parry, Charles J.) The 2-class group of biquadratic fields. II. **80a:12006**
Cioffari, Vincent G. The Euclidean condition in pure cubic and complex quartic fields. **80f:12002**
Parry, Charles J. *See* **Brown, Ezra, 80a:12006**
Shanks, Daniel *See* **Williams, H. C., 80g:12002**
Williams, H. C. (*with* Shanks, Daniel) A note on class-number one in pure cubic fields. **80g:12002**

Secondary classifications:

Bernstein, Leon An invariant for combinatorial identities. **(80c:12006)**
Brunotte, Horst (*with* Halter-Koch, Franz) Zur Einheitenberechnung in totalreellen kubischen Zahlkörpern nach Godwin. **(80j:12003)**
Cohn, Harvey Dyadotropic polynomials. II. **(80e:12008)**
Halter-Koch, Franz *See* **Brunotte, Horst, (80j:12003)**
Langmayr, Franz Zur simultanen Diophantischen Approximation. I. (English summary) **(80j:10038a)**
Zur simultanen Diophantischen Approximation. II. (English summary) **(80j:10038b)**

12A35 Abelian and metabelian extensions (including cyclotomic, Kummer, cyclic)

Bhaskaran, M. Construction of genus field and some applications. **80j:12002**
Coates, J. (*with* Wiles, A.) On p-adic L-functions and elliptic units. **80a:12007**
Ernvall, Reijo (*with* Metsänkylä, Tauno) Cyclotomic invariants and E-irregular primes. **80c:12004a**
Generalized Bernoulli numbers, generalized irregular primes, and class number. **80m:12002**
Corrigenda: "Cyclotomic invariants and E-irregular primes" (Math. Comp. 32 (1978), no. 142, 617–629) by Ernvall and T. Metsänkylä. **80c:12004b**
Gerth, Frank, III The Iwasawa invariant μ for quadratic fields. **80e:12004**
The ideal class groups of two cyclotomic fields. **80k:12004**
Gillard, Roland Formulations de la conjecture de Leopoldt et étude d'une condition suffisante. **80i:12007**
Greenberg, Ralph A note on K_2 and the theory of Z_p-extensions. **80d:12002**
Halter-Koch, Franz Über den p-Rang der Klassengruppe des Kompositums algebraischer Zahlkörper. **80f:12003**
Kida, Yûji On cyclotomic Z_2-extensions of imaginary quadratic fields. **80d:12003**
Lang, Serge Classes d'idéaux et classes de diviseurs. **80k:12005**
Masley, John Myron Class numbers of real cyclic number fields with small conductor. **80e:12005**
On the first factor of the class number of prime cyclotomic fields. **80f:12004**
Metsänkylä, Tauno *See* **Ernvall, Reijo, 80c:12004a** *and* **Ernvall, Reijo, 80c:12004b**
Ribet, Kenneth A. Sur la recherche des p-extensions non ramifiées de $Q(\mu_p)$. (English summary) **80f:12005**
Taylor, M. J. Galois module structure of integers of relative abelian extensions. **80e:12006**
Uehara, Tsuyoshi Fermat's conjecture and Bernoulli numbers. **80a:12008**
Washington, Lawrence C. The non-p-part of the class number in a cyclotomic Z_p-extension. **80c:12005**
Wiles, A. *See* **Coates, J., 80a:12007**

Secondary classifications:

(Friedlander, John) *See* **Mallik, A., (80h:12010)**
Gerth, Frank, III Upper bounds for an Iwasawa invariant. **(80f:12006)**
Kudo, Aichi Generalized Bernoulli numbers and the basic Z_p-extensions of imaginary quadratic number fields. **(80e:12012)**
Mallik, A. A note on J. B. Friedlander's paper: "On the class numbers of certain quadratic extensions" [Acta Arith. **28** (1975/76), no. 4, 391–393; MR 52 #10683]. **(80h:12010)**
Moser, Nicole Sur les unités d'une extension galoisienne non abélienne de degré pq du corps des rationnels, p et q nombres premiers impairs. (English summary) **(80e:12010)**
Tolstikov, A. V. Application of fields generated by Gauss periods to the study of cyclic Diophantine equations. II. (Russian) **(80h:10024)**
Watabe, Mutsuo On class numbers of some cyclotomic fields. **(80h:12005)**

12A40 Other number fields

Perrin-Riou, Bernadette Plongements d'extensions galoisiennes. **80g:12003**
Sergeev, È. A. An integral basis for pure cubic extensions of one-class quadratic fields. (Russian) **80b:12003**
Vélez, William Yslas Prime ideal decomposition in $F(\mu^{1/p})$. **80a:12009**

12A45 Units and factorization

Bernstein, Leon An invariant for combinatorial identities. **80c:12006**
Applications of units. **80e:12007**
An algorithm for Halter-Koch units. **80c:12007**
Brunotte, Horst (*with* Halter-Koch, Franz) Zur Einheitenberechnung in totalreellen kubischen Zahlkörpern nach Godwin. **80j:12003**
Cohn, Harvey Note on dyadotropic cubics. **80a:12010**
Dyadotropic polynomials. II. **80e:12008**
Craig, Maurice Correction to: "A construction for irregular discriminants" (Osaka J. Math. **14** (1977), no. 2, 365–402). **80a:12011**
Gillard, Roland Remarques sur les unités cyclotomiques et les unités elliptiques. **80j:12004**
Halter-Koch, Franz Die Struktur der Einheitengruppe für eine Klasse metazyklischer Erweiterungen algebraischer Zahlkörper. **80b:12004**
See also **Brunotte, Horst, 80j:12003**
Kubert, Daniel Sion (*with* Lang, Serge) The p-primary component of the cuspidal divisor class group on the modular curve $X(p)$. **80c:12008**
Lagarias, J. C. Signatures of units and congruences (mod 4) in certain real quadratic fields. **80e:12009**
Lang, Serge *See* **Kubert, Daniel Sion, 80c:12008**
Martinet, Jacques Petits discriminants. **80c:12009**
Morikawa, Ryozo On units of real quadratic number fields. **80i:12008**
Moser, Nicole Sur les unités d'une extension galoisienne non abélienne de degré pq du corps des rationnels, p et q nombres premiers impairs. (English summary) **80e:12010**
Nakagoshi, Norikata The structure of the multiplicative group of residue classes modulo p^{N+1}. **80c:12010**
Neubrand, Michael Einheiten in algebraischen Funktionen- und Zahlkörpern. **80b:12005**
Oozeki, Kiyota On truncated units. **80c:12011**
On some truncated units in algebraic number fields of degree $n > 3$. **80j:12005**
Schmidt, C.-G. Die Relationen von Gaußschen Summen und Kreiseinheiten. **80k:12006**
Stender, Hans-Joachim Zur Parametrisierung reell-quadratischer Zahlkörper. **80k:12007**
Über die Grundeinheit der reell-quadratischen Zahlkörper $Q(\sqrt{(A^2N^2 + BN + C)})$. **80k:12008**

Secondary classifications:

Buhr, P. A. *See* **Williams, H. C., (80e:12003)**
Dubois, Eugène Meilleures approximations diophantiennes. Application à la recherche de l'unité fondamentale des corps cubiques non totalement réels. (English summary) **(80g:10030)**
Ennola, Veikko J-fields generated by roots of cyclotomic integers. **(80f:10016)**
Gillard, Roland Z_l-extensions, fonctions L l-adiques et unités cyclotomiques. **(80k:12016)**
Kubert, Daniel Sion (*with* Lang, Serge) Independence of modular units on Tate curves. **(80f:10026)**
Lang, Serge *See* **Kubert, Daniel Sion, (80f:10026)**
Orde, H. L. S. On Dirichlet's class number formula. **(80a:10036)**
Robert, Gilles Nombres de Hurwitz et unités elliptiques. **(80k:12010)**
Schertz, Reinhard (*with* Stender, Hans-Joachim) Eine Abschätzung der Klassenzahl gewisser reiner Zahlkörper sechsten Grades. **(80k:12011)**
Stender, Hans-Joachim *See* **Schertz, Reinhard, (80k:12011)**
Williams, H. C. (*with* Buhr, P. A.) Calculation of the regulator of $Q(\sqrt{D})$ by use of the nearest integer continued fraction algorithm. **(80e:12003)**

12A50 Class number, discriminant

Arai, Masao On the discriminants of algebraic extension fields of degree four. (Japanese) **80c:12011**

Bergé, Anne-Marie Arithmétique d'une extension galoisienne à groupe d'inertie cyclique. (English summary) **80a:12012**

Buell, Duncan A. Computer computation of class groups of quadratic number fields. **80h:12003**

Castela, Corine Nombre de classes d'idéaux d'une extension diédrale d'un corps de nombres. (English summary) **80c:12012**

Fröhlich, A. Some problems of Galois module structure for wild extensions. **80a:12013**

Funakura, Takeo On Artin theorem of induced characters. **80b:12006**

Gerth, Frank, III Upper bounds for an Iwasawa invariant. **80f:12006**

Gras, Georges Nombre de φ-classes invariantes. Application aux classes des corps abéliens. **80c:12013**

Greenberg, Ralph On the structure of certain Galois groups. **80b:12007**

Kobayashi, Shinju Divisibility of class numbers of real cyclic extensions of degree 4 over Q. **80g:12004**

Kudo, Aichi Generalized Bernoulli numbers and the basic $\mathbf{Z}_p$-extensions of imaginary quadratic number fields. **80e:12012**

Lu, Hong Wen The class-number of a real quadratic field. (Chinese) **80e:12013**

Martinet, Jacques Corps de nombre de classes 1. **80k:12009**

Oriat, Bernard (*with* Satgé, Philippe) Un essai de généralisation du "Spiegelungssatz". **80f:12007**

Parry, Charles J. On the class number of relative quadratic fields. **80h:12004**

Perlis, Robert On the class numbers of arithmetically equivalent fields. **80c:12014**

Robert, Gilles Nombres de Hurwitz et unités elliptiques. **80k:12010**

Satgé, Philippe *See* **Oriat, Bernard, 80f:12007**

Schertz, Reinhard Über die analytische Klassenzahlformel für reelle abelsche Zahlkörper. **80e:12014**

(*with* Stender, Hans-Joachim) Eine Abschätzung der Klassenzahl gewisser reiner Zahlkörper sechsten Grades. **80k:12011**

Stender, Hans-Joachim *See* **Schertz, Reinhard, 80k:12011**

Watabe, Mutsuo On class numbers of some cyclotomic fields. **80h:12005**

Secondary classifications:

Bloom, John R. On the invariants of some $\mathbf{Z}_l$-extensions. **(80f:12006)**

Diaz y Diaz, Francisco (*with* Shanks, Daniel; Williams, H. C.) Quadratic fields with 3-rank equal to 4. **(80f:12004)**

Ernvall, Reijo (*with* Metsänkylä, Tauno) Cyclotomic invariants and *E*-irregular primes. **(80c:12004a)**

Generalized Bernoulli numbers, generalized irregular primes, and class number. **(80m:12002)**

Corrigenda: "Cyclotomic invariants and *E*-irregular primes" (Math. Comp. **32** (1978), no. 142, 617–629) by Ernvall and T. Metsänkylä. **(80c:12004b)**

Fried, Ervin (*with* Kollár, János) Automorphism groups of algebraic number fields. **(80d:14015)**

(Friedlander, John) *See* **Mallik, A., (80h:12010)**

Gerth, Frank, III The ideal class groups of two cyclotomic fields. **(80k:12004)**

Hoffstein, Jeffrey Some analytic bounds for zeta functions and class numbers. **(80k:12019)**

Kollár, János *See* **Fried, Ervin, (80d:14015)**

Kubert, Daniel Sion (*with* Lang, Serge) Stickelberger ideals. **(80a:10042a)**

(*with* Lang, Serge) The index of Stickelberger ideals of order 2 and cuspidal class numbers. **(80a:10042b)**

Lang, Serge *See* **Kubert, Daniel Sion, (80a:10042a)** *and* **Kubert, Daniel Sion, (80a:10042b)**

Mallik, A. A note on J. B. Friedlander's paper: "On the class numbers of certain quadratic extensions" [Acta Arith. **28** (1975/76), no. 4, 391–393; MR **52** #10683]. **(80h:12010)**

Masley, John Myron Class numbers of real cyclic number fields with small conductor. **(80e:12005)**

On the first factor of the class number of prime cyclotomic fields. **(80f:12004)**

Metsänkylä, Tauno *See* **Ernvall, Reijo, (80c:12004a)** *and* **Ernvall, Reijo, (80c:12004b)**

Müller, Helmut A calculation of class-numbers of imaginary quadratic numberfields. **(80i:12001)**

Nakahara, Toru On real quadratic fields whose ideal class groups have a cyclic *p*-subgroup. **(80a:12005)**

Onabe, Midori On idèle class groups of imaginary quadratic fields. **(80d:12001)**

Shanks, Daniel *See* **Williams, H. C., (80g:12002)** *and* **Diaz y Diaz, Francisco; et al., (80i:12004)**

Washington, Lawrence C. The non-*p*-part of the class number in a cyclotomic $\mathbf{Z}_p$-extension. **(80c:12005)**

Williams, H. C. (*with* Shanks, Daniel) A note on class-number one in pure cubic fields. **(80g:12002)**

See also **Diaz y Diaz, Francisco; et al., (80i:12004)**

12A55 Galois theory

Arnaudon, Madeleine Problèmes de normes dans les extensions galoisiennes de corps de nombres. **80i:12009**

Le théorème des normes de Hasse dans certaines extensions. **80k:12012**

Belyĭ, G. V. Galois extensions of a maximal cyclotomic field. (Russian) **80f:12008**

Bertrandias, Françoise Décomposition du Galois-module des entiers d'une extension cyclique de degré premier d'un corps de nombres ou d'un corps local. (English summary) **80e:12015**

Bhandari, S. K. (*with* Nanda, V. C.) Ideal matrices for relative extensions. **80m:12003**

Bond, Robert J. Some results on *p*-extensions of local and global fields. **80h:12006**

Cassou-Noguès, Philippe Structure galoisienne des anneaux d'entiers. **80g:12005**

Cohen, S. D. The distribution of the Galois groups of integral polynomials. **80j:12006**

Erbach, D. W. (*with* Fisher, J.; McKay, John) Polynomials with PSL(2, 7) as Galois group. **80m:12004**

Fisher, J. *See* **Erbach, D. W.; et al., 80m:12004**

Jehne, Wolfram On knots in algebraic number theory. **80k:12013**

Klingen, Norbert Atomare Kronecker-Klassen mit speziellen Galoisgruppen. **80m:12006**

Lefton, Phyllis On the Galois groups of cubics and trinomials. **80m:12007**

Matzat, Bernd Heinrich Konstruktion von Zahlkörpern mit der Galoisgruppe M_{11} über $\mathbf{Q}(\sqrt{-11})$. (English summary) **80m:12008**

McKay, John Some remarks on computing Galois groups. **80m:12005**

See also **Erbach, D. W.; et al., 80m:12004**

Nanda, V. C. *See* **Bhandari, S. K., 80m:12003**

Poitou, Georges Conditions globales pour les problèmes de plongement à noyau abélien. (English summary) **80g:12006**

Satgé, Philippe Inégalites de miroir. **80k:12014**

(Scholz, Arnold) *See* **Jehne, Wolfram, 80k:12013**

Yahagi, Osamu Construction of number fields with prescribed *l*-class groups. **80d:12004**

Secondary classifications:

Cougnard, Jean Sur des invariants associés aux extensions de degré pq. **(80g:12007)**

Gay, David A. On normal radical extensions of real fields. **(80m:12023)**

Ohta, Kiichiro On the *p*-class groups of a Galois number field and its subfields. **(80e:12016)**

12A57 Integral representations related to algebraic numbers [See also 20C10.]

Bouvier, L. (*with* Payan, J. J.) Sur la structure galoisienne du groupe des unités d'un corps abélien de type (p, p). (English summary) **80j:12007**

Bröcker, Ludwig Über die Pythagoraszahl eines Körpers. **80a:12014**

Cougnard, Jean Sur des invariants associés aux extensions de degré pq. **80g:12007**

Payan, J. J. *See* **Bouvier, L., 80j:12007**

Ullom, Stephen V. Class groups of cyclotomic fields and group rings. **80k:12015**

Secondary classifications:

Alperin, Roger (*with* Dennis, R. Keith) K_2 of quaternion algebras. **(80h:16020)**

Cassou-Noguès, Philippe Quelques théorèmes de base normale d'entiers. (English summary) **(80j:12011)**

Dennis, R. Keith *See* **Alperin, Roger, (80h:16020)**

Fein, Burton Minimal splitting fields for group representations. II. **(80c:20009)**

Gras, Georges Annulation du groupe des ℓ-classes généralisées d'une extension abélienne réelle de degré premier à ℓ. (English summary) **(80k:12008)**

Rehmann, Ulf (*with* Stuhler, Ulrich) On K_2 of finite-dimensional division algebras over arithmetical fields. **(80g:12012)**

Stuhler, Ulrich *See* **Rehmann, Ulf, (80g:12012)**

Ullom, Stephen V. Swan modules, class fields, and class groups of cyclic *p*-groups. **(80h:20017)**

12A60 Galois cohomology [See also 12Gxx, 16A16.]

Secondary classifications:

Rohlfs, J. Arithmetisch definierte Gruppen mit Galoisoperation. **(80j:20043)**

12A62 Applications of algebraic *K*-theory

Secondary classifications:

Alperin, Roger (*with* Wright, David Lee) $K_2(2, k[T, T^{-1}])$ is generated by "symbols". **(80k:13006)**

Cougnard, Jean Sur des invariants associés aux extensions de degré pq. **(80g:12007)**

Greenberg, Ralph A note on K_2 and the theory of $\mathbf{Z}_p$-extensions. **(80d:12002)**

Wright, David Lee *See* **Alperin, Roger, (80k:13006)**

12A65 Class field theory

Gerth, Frank, III The Hasse norm principle in cyclotomic number fields. **80d:12005**

Gillard, Roland $\mathbf{Z}_l$-extensions, fonctions L l-adiques et unités cyclotomiques. **80k:12016**

Gras, Georges Sur l'annulation en 2 des classes relatives des corps abéliens. **80k:12017**

Annulation du groupe des ℓ-classes généralisées d'une extension abélienne réelle de degré premier à ℓ. (English summary) **80k:12008**

Gurak, S. The Hasse norm principle in non-abelian extensions. **80d:12006**

Klingen, Norbert Zur Modelltheorie lokaler und globaler Körper. **80a:12015**

Martinet, Jacques Tours de corps de classes et estimations de discriminants. **80f:12009**

Ohta, Kiichiro On the *p*-class groups of a Galois number field and its subfields. **80e:12016**

Schertz, Reinhard Teilkörper relativ abelscher Erweiterungen imaginär-quadratischer Zahlkörper, deren Klassenzahl durch Primteiler des Körpergrades teilbar ist. **80b:12008**

Shirai, Susumu On the central class field mod m of Galois extensions of an algebraic number field. **80c:12015**

Watabe, Mutsuo An arithmetical application of elliptic functions to the theory of biquadratic residues. **80k:12018**

Secondary classifications:

Bhaskaran, M. Construction of genus field and some applications. **(80j:12002)**

Coates, J. (*with* Wiles, A.) On *p*-adic *L*-functions and elliptic units. **(80a:12007)**

Halter-Koch, Franz Über den *p*-Rang der Klassengruppe des Kompositums algebraischer Zahlkörper. **(80f:12003)**

Katz, Nicholas M. p-adic L-functions for CM fields. **(80h:10039)**
Onabe, Midori On idèle class groups of imaginary quadratic fields. **(80d:12001)**
Satgé, Philippe Inégalites de miroir. **(80k:12014)**
Wiles, A. *See* **Coates, J., (80a:12007)**

12A67 Langlands-Weil conjectures, nonabelian class field theory [See also 10Dxx, 22E55.]

Shahidi, Freydoon Modular forms and L-functions for GL_2. **80g:12008**
Tate, John Number theoretic background. **80m:12009**

Secondary classifications:

Asai, Tetsuya On the Doi-Naganuma lifting associated with imaginary quadratic fields. **(80b:10034)**
Gross, Benedict H. On an identity of Chowla and Selberg. **(80i:10037)**
Ihara, Yasutaka Introduction to the work of Mr. Takuro Shintani, winner of the 6th Japan Mathematical Society Iyanaga Prize. (Japanese) **(80k:10003)**
Katz, Nicholas M. p-adic L-functions for CM fields. **(80h:10039)**
Saito, Hiroshi Automorphic forms and algebraic extensions of number fields. II. **(80h:10033)**

12A70 Zeta functions of number fields and generalizations [See also 10H08, 10H10.]

Baraky, Daniel Fonctions zeta p-adiques d'une classe de rayon des corps de nombres totalement réels. **80g:12009**
Báyer, Pilar (*with* Neukirch, Jürgen) On values of zeta functions and l-adic Euler characteristics. **80b:12009**
Cassou-Noguès, Pierrette p-adic L-functions for totally real number field. **80h:12009a**
Fonctions L p-adiques des corps de nombres totalement réels. **80b:12010**
Valeurs aux entiers négatifs des fonctions zèta et fonctions zèta p-adiques. **80h:12009b**
(Friedlander, John) *See* **Mallik, A., 80h:12010**
Hatada, Kazuyuki On the values at rational integers of the p-adic Dirichlet L functions. **80f:12010**
Hoffstein, Jeffrey Some analytic bounds for zeta functions and class numbers. **80h:12019**
Igusa, Jun-ichi A remark on zeta functions. **80b:12011**
Koblitz, Neal A new proof of certain formulas for p-adic L-functions. **80f:12011**
Komatsu, Keiichi On the adele rings and zeta-functions of algebraic number fields. **80c:12016**
Lagarias, J. C. (*with* Odlyzko, Andrew M.) On computing Artin L-functions in the critical strip. **80g:12010**
Lang, Serge Sur la conjecture de Birch-Swinnerton-Dyer (d'après J. Coates et A. Wiles). **80f:12012**
Mallik, A. A note on J. B. Friedlander's paper: "On the class numbers of certain quadratic extensions" [Acta Arith. **28** (1975/76), no. 4, 391–393; MR **52** #10683]. **80h:12010**
Metsänkylä, Tauno Iwasawa invariants and Kummer congruences. **80d:12007**
Neukirch, Jürgen *See* **Báyer, Pilar, 80b:12009**
Odlyzko, Andrew M. *See* **Lagarias, J. C., 80g:12010**
Perlis, Robert (*with* Schinzel, A.) Zeta functions and the equivalence of integral forms. **80j:12008**
Ribet, Kenneth A. p-adic L-functions attached to characters of p-power order. (French summary) **80b:12012**
Schinzel, A. *See* **Perlis, Robert, 80j:12008**
Turner, Stuart Adele rings of global field of positive characteristic. **80c:12017**
Washington, Lawrence C. Kummer's calculation of $L_p(1, \chi)$. **80e:12017**
Weinstein, Lenard The zeros of the Artin L-series of a cubic field on the critical line. **80g:12011**

Secondary classifications:

Báyer, Pilar Values of the Iwasawa L-functions at the point $s = 1$. **(80h:12016)**
Gillard, Roland Formulations de la conjecture de Leopoldt et étude d'une condition suffisante. **(80i:12007)**
Gras, Georges Annulation du groupe des ℓ-classes généralisées d'une extension abélienne réelle de degré premier à ℓ. (English summary) **(80h:12008)**
Ismoilov, D. Summation of the number of solutions of a quadratic congruence. (Russian. Tajiki summary) **(80a:10062)**
Johnson, David Mean values of Hecke L-functions. **(80g:10040)**
Joly, J. R. (*with* Moser, Cl.) Ordre de grandeur de $L(1, \chi)$ et de $L'(1, \chi)$. (English summary) **(80d:10060)**
Moser, Cl. *See* **Joly, J. R., (80d:10060)**
Perlis, Robert On the class numbers of arithmetically equivalent fields. **(80c:12014)**
Pintz, János Siegel roots and the prime number theorem. (Hungarian. English summary) **(80k:10040)**
Solomon, Louis Partially ordered sets with colors. **(80c:05011)**
Yui, Noriko A note on formal groups and zeta functions. **(80c:14029)**

12A75 Density theorems

Odoni, R. W. K. Representations of algebraic integers by binary quadratic forms and norm forms from full modules of extension fields. **80h:12011**

12A80 Arithmetic of algebras [See also 12B35, 16A18, 16A39.]

Bak, Anthony (*with* Rehmann, Ulf) Le problème des sous-groupes de congruence dans $SL_{n\geq 2}$ sur un corps gauche. (English summary) **80i:12010**
Lipnickiĭ, V. A. Triviality of the reduced Whitehead group over certain fields. (Russian) **80a:12016**
Mollin, Richard The Schur group of a field of characteristic zero. **80c:12018**
Uniform distribution classified. **80i:12011**
Nyman, T. (*with* Whaples, G.) Simple algebras over rational function fields. **80k:12020**
Rehmann, Ulf (*with* Stuhler, Ulrich) On K_2 of finite-dimensional division algebras over arithmetical fields. **80g:12012**
See also **Bak, Anthony, 80i:12010**
Stuhler, Ulrich *See* **Rehmann, Ulf, 80g:12012**
Tits, Jacques Groupes de Whitehead de groupes algébriques simples sur un corps (d'après V. P. Platonov et al.). **80d:12008**
Whaples, G. *See* **Nyman, T., 80k:12020**

Secondary classifications:

Alperin, Roger (*with* Dennis, R. Keith) K_2 of quaternion algebras. **(80h:16020)**
Dennis, R. Keith *See* **Alperin, Roger, (80h:16020)**
Drozd, Ju. A. (*with* Turčin, V. M.) Locally conjugate orders. (Russian) **(80c:16007)**
Fein, Burton (*with* Schacher, Murray; Sonn, Jack) Brauer groups of rational function fields. **(80h:12019)**
Jančevskiĭ, V. I. Reduced unitary K-theory and division algebras over Henselian discretely valued fields. (Russian) **(80b:16019)**
Rehmann, Ulf Zentrale Erweiterungen der speziellen linearen Gruppe eines Schiefkörpers. **(80h:18009)**
Reiter, H. Über den Satz von Weil-Cartier. (English summary) **(80f:43015)**
Schacher, Murray *See* **Fein, Burton; et al., (80h:12019)**
Sonn, Jack *See* **Fein, Burton; et al., (80h:12019)**
Turčin, V. M. *See* **Drozd, Ju. A., (80c:16007)**
Yamada, Toshihiko More on the Schur index and the order and exponent of a finite group. **(80a:20013)**

12A82 Zeta functions of algebras

12A85 Analysis in adèle rings and groups

Shyr, Jih Min Class numbers of binary quadratic forms over algebraic number fields. **80g:12013**

Secondary classifications:

Benedetto, J. J. Zeta functions for idelic pseudomeasures. **(80k:10039)**
Igusa, Jun-ichi ★Forms of higher degree. **(80m:10020)**
A remark on zeta functions. **(80b:12011)**
Komatsu, Keiichi On the adele rings and zeta-functions of algebraic number fields. **(80c:12016)**
Onabe, Midori On idèle class groups of imaginary quadratic fields. **(80d:12001)**
Sarkisjan, R. A. An occurrence problem for adèle groups. (Russian) **(80h:20065)**
Turner, Stuart Adele rings of global field of positive characteristic. **(80c:12017)**

12A90 Arithmetic theory of algebraic function fields [See also 14–XX.]

van den Dries, Lou (*with* Ribenboim, Paulo) Application de la théorie des modèles aux groupes de Galois de corps de fonctions. (English summary) **80b:12013**
Frey, Gerhard On the structure of the class group of a function field. **80m:12010**
Haris, Stephen J. Complete reducibility of admissible representations over function fields. **80f:12012**
Madden, Daniel J. Arithmetic in generalized Artin-Schreier extensions of $k(x)$. **80d:12009**
Mignotte, Maurice Séries rationnelles en une variable. **80g:12014**
Ribenboim, Paulo *See* **van den Dries, Lou, 80b:12013**
Schuppar, Berthold Elementare Aussagen zur Arithmetik und Galoistheorie von Funktionenkörpern. **80m:12011**

Secondary classifications:

Cohn, P. M. Centralisateurs dans les corps libres. **(80f:16004)**
Henn, Hans-Wolfgang Funktionenkörper mit grosser Automorphismengruppe. **(80a:14012)**
Matzat, Bernd Heinrich Konstruktion von Zahlkörpern mit der Galoisgruppe M_{11} über $Q(\sqrt{-11})$. (English summary) **(80m:12008)**

12A95 Totally real and totally positive fields

Secondary classifications:

Cassou-Noguès, Pierrette Fonctions L p-adiques des corps de nombres totalement réels. **(80b:12010)**
Pfeuffer, Horst On a conjecture about class numbers of totally positive quadratic forms in totally real algebraic number fields. (German summary) **(80h:10030)**

12A99 None of the above, but in this section

Secondary classifications:

Mitsui, Takayoshi On the partition problem in an algebraic number field. **(80d:10071)**
Stewart, Cameron L. On a theorem of Kronecker and a related question of Lehmer. **(80j:10039)**

12Bxx Algebraic number theory: local and p-adic fields

12B05 Polynomials

12B10 Ramification and extension theory

Avtar, Ram (*with* Sankaran, N.) Higher ramification in Hensel fields. **80j:12009**
Lauble, François Sur les groupes de ramification supérieurs. (English summary) **80e:12014**
Lomadze, V. G. On the ramification theory of two-dimensional local fields. (Russian) **80k:12021**
Sankaran, N. *See* **Avtar, Ram**, **80j:12009**
Sueyoshi, Yutaka On ramification of p-extensions of $\mathfrak{p}$-adic number fields. **80e:12018**

12B15 Galois theory

Bertrandias, Françoise Sur les extensions cycliques de degré p^n d'un corps local. **80k:12022**
Fresnel, Jean Produit tensoriel topologique des corps valués. **80h:12012a**
Topological tensor products of p-adic fields. **80h:12012b**
Geyer, Wulf-Dieter Galois groups of intersections of local fields. **80a:12017**
Jakovlev, A. V. Structure of the multiplicative group of a tamely ramified extension of a local field of odd degree. (Russian) **80c:12019**
Jarden, Moshe (*with* Ritter, Jürgen) On the characterization of local fields by their absolute Galois groups. **80m:12012**
Koch, Helmut Representations of the Galois group and of the multiplicative groups of skew fields over local fields. (Russian) **80j:12010**
Krasner, Marc Remarques au sujet d'une note de J.-P. Serre: "Une 'formule de masse' pour les extensions totalement ramifiées de degré donné d'un corps local" [C. R. Acad. Sci. Paris Sér. A-B **286** (1978), no. 22, A1031–A1036; MR 80a:12018]: une démonstration de la formule de M. Serre à partir de mon théorème sur le nombre des extensions séparables d'un corps valué localement compact, qui sont d'un degré et d'une différente donnés. (English summary) **80k:12023**
Lur'e, B. B. Totally solvable imbedding problems for local fields. (Russian) **80k:12024**
Matignon, Michel Sous-corps fermés du complété de la clôture algébrique d'un corps local. (English summary) **80e:12019**
Ritter, Jürgen $\mathfrak{P}$-adic fields having the same type of algebraic extensions. **80m:12013**
See also **Jarden, Moshe**, **80m:12012**
(Serre, Jean-Pierre) *See* **Krasner, Marc**, **80k:12023**
Shiraï, Susumu A remark concerning the 2-adic number field. **80c:12020**
Zel'venskiĭ, I. G. The maximal extension without simple ramification of a local field. (Russian) **80d:12010**

Secondary classifications:

Bertrandias, Françoise Décomposition du Galois-module des entiers d'une extension cyclique de degré premier d'un corps de nombres ou d'un corps local. (English summary) **(80e:12015)**
Sueyoshi, Yutaka On ramification of p-extensions of $\mathfrak{p}$-adic number fields. **(80e:12018)**

12B17 Integral representations

Cassou-Noguès, Philippe Quelques théorèmes de base normale d'entiers. (English summary) **80j:12011**
Lorenz, Falko Zur Schurgruppe eines lokalen Körpers. **80m:12014**
Miyata, Yoshimasa On the module structure in a cyclic extension over a $\mathfrak{p}$-adic number field. **80f:12013**

Secondary classifications:

Spiegel, Eugene (*with* Trojan, Allan) The Schur subgroup of a p-adic field. **(80e:20007)**
Trojan, Allan *See* **Spiegel, Eugene**, **(80e:20007)**

12B20 Galois cohomology [See also 12Gxx, 16A16.]

Bergé, Anne-Marie Extensions galoisiennes d'un corps local à groupes d'inertie cycliques. **80h:12013**
Ch'ên, Yung Ch'iu Corrigendum to the paper: "On Demushkin groups and their Schur multiplicators" (Chinese J. Math. **5** (1977), no. 2, 107–112). **80e:12020**
Fontaine, Jean-Marc (*with* Wintenberger, Jean-Pierre) Le "corps des normes" de certaines extensions algébriques de corps locaux. (English summary) **80b:12015**
(*with* Wintenberger, Jean-Pierre) Extensions algébrique et corps des normes des extensions APF des corps locaux. (English summary) **80h:12014**
Jannsen, Uwe (*with* Wingberg, Kay) Die p-Vervollständigung der multiplikativen Gruppe einer p-Erweiterung eines irregulären $\mathfrak{p}$-adischen Zahlkörpers. **80f:12013**
Sarkisjan, Ju. S. Profinitely generated Γ-modules. (Russian) **80j:12012**
Wingberg, Kay Die Einseinheitengruppe von p-Erweiterungen regulärer $\mathfrak{p}$-adischer Zahlkörper als Galoismodul. **80d:12011**
See also **Jannsen, Uwe**, **80f:12013**
Wintenberger, Jean-Pierre Extensions de Lie et groupes d'automorphismes des corps locaux de caractéristique p. (English summary) **80h:12015**
See also **Fontaine, Jean-Marc**, **80b:12015** *and* **Fontaine, Jean-Marc**, **80b:12014**

Secondary classifications:

Frey, Gerhard Dualitätssatz für endliche kommutative Gruppenschemata über Kongruenzfunktionenkörpern. **(80j:14041)**
Šestakova, G. P. The homological determination of torsion modules. (Russian) **(80k:12020)**

12B22 Applications of algebraic K-theory

12B25 Class field theory

Brückner, H. ★Explizites Reziprozitätsgesetz und Anwendungen. **80m:12015**
Kato, Kazuya A generalization of local class field theory by using K-groups. II. **80c:12021**
Kolyvagin, V. A. The norm residue symbol in local fields. (Russian) **80d:12012**
Serre, Jean-Pierre Une "formule de masse" pour les extensions totalement ramifiées de degré donné d'un corps local. (English summary) **80a:12018**
Vostokov, S. V. An explicit form of the reciprocity law. (Russian) **80f:12014**

Secondary classifications:

Klingen, Norbert Zur Modelltheorie lokaler und globaler Körper. **(80a:12015)**
Parišin, A. N. Abelian coverings of arithmetic schemes. (Russian) **(80k:14014)**
Sueyoshi, Yutaka On ramification of p-extensions of $\mathfrak{p}$-adic number fields. **(80e:12018)**

12B27 Langlands-Weil conjectures, nonabelian class field theory [See also 10Dxx, 22E50.]

Henniart, Guy ★Représentations du groupe de Weil d'un corps local. **80m:12016**
Kutzko, P. C. The irreducible imprimitive local Galois representations of prime dimension. **80f:12015**
Tunnell, J. Report on the local Langlands conjecture for $GL(2)$. **80k:12025**

Secondary classifications:

Yamazaki, Tadashi On a generalization of the Fourier transformation. **(80a:22019)**

12B30 Zeta and L-functions [See also 10H08, 10H10.]

Bayer, Pilar Values of the Iwasawa L-functions at the point $s=1$. **80k:12016**
Diamond, Jack On the values of p-adic L-functions at positive integers. **80j:12013**
Ferrero, Bruce (*with* Greenberg, Ralph) On the behavior of p-adic L-functions at $s=0$. **80f:12016**
Goss, David von Staudt for $\mathbf{F}_q[T]$. **80a:12019**
Greenberg, Ralph *See* **Ferrero, Bruce**, **80f:12016**
Kanemitsu, Shigeru A note on the general divisor problem. **80e:12022**
Morita, Yasuo A p-adic integral representation of the p-adic L-function. **80a:12020**
Osipov, Ju. V. p-adic zeta functions. (Russian) **80j:12014**

Secondary classifications:

Amice, Yvette Duals. **(80f:12017)**
Barsky, Daniel Fonctions zeta p-adiques d'une classe de rayon des corps de nombres totalement réels. **(80g:12009)**
Diamond, Jack The p-adic gamma measures. **(80d:12013)**
Gras, Georges Annulation du groupe des l-classes généralisées d'une extension abélienne réelle de degré premier à l. (English summary) **(80h:12008)**
Washington, Lawrence C. Kummer's calculation of $L_p(1,\chi)$. **(80e:12017)**

12B35 Arithmetic of algebras [See also 12A80, 16A18, 16A39.]

Secondary classifications:

Nyman, T. (*with* Whaples, G.) Simple algebras over rational function fields. **(80k:12020)**
Voskresenskiĭ, V. E. R-equivalence questions on semisimple groups. (Russian) **(80j:14021)**
Whaples, G. *See* **Nyman, T.**, **(80k:12020)**

12B37 Zeta functions of algebras

12B40 Other analytic theory

Amice, Yvette Duals. **80f:12017**
Barsky, Daniel On Morita's p-adic Γ-function. **80c:12023**
Benzaghou, B. Sur les séries rationnelles à une variable. **80f:12018**
Diamond, Jack The p-adic gamma measures. **80d:12013**
Diarra, Bertin Sur quelques représentations p-adiques de $\mathbf{Z}_p$. **80m:12017**
Fresnel, Jean (*with* de Mathan, Bernard) Algèbres L^1 p-adiques. (English summary) **80d:12014**
Gross, Benedict H. (*with* Koblitz, Neal) Gauss sums and the p-adic Γ-function. **80g:12015**
Kaljulaid, V. N. A formula for the L_1-seminorm corresponding to a measure on the compact ring of p-adic integers. (Russian) **80j:12015**
Klehne, Ursel Zeros of polynomials over valued fields. **80f:12019**
Koblitz, Neal *See* **Gross, Benedict H.**, **80g:12015**
de Mathan, Bernard *See* **Fresnel, Jean**, **80d:12014**
Natarajan, P. N. Multiplication of series with terms in a non-Archimedean field. **80c:12024**
Stavskiĭ, M. Š. Approximation of continuous and differentiable functions in a locally compact field. (Russian) **80f:12020**
Višik, M. M. Applications of the Šnirel'man integral in non-Archimedean analysis. (Russian) **80d:12015**
Woodcock, C. F. Parseval's formula and p-adic interpolation. **80k:12026**
Convolutions on the ring of p-adic integers. **80k:12027**

Conference:
p**-adic Analysis** *See* **Proceedings: Conference on p-adic Analysis**, **80a:12021**
Nijmegen *See* **Proceedings: Conference on p-adic Analysis**, **80a:12021**
p**-adic analysis** *See* **Proceedings: Conference on p-adic Analysis**, **80a:12021**
Proceedings:
Conference on p-adic Analysis ★Proceedings of the Conference on p-adic Analysis. **80a:12021**

Secondary classifications:

Barsky, Daniel Fonctions zeta p-adiques d'une classe de rayon des corps de nombres totalement réels. **(80g:12009)**
Cassou-Noguès, Pierrette p-adic L-functions for totally real number field. **(80h:12009a)** Valeurs aux entiers négatifs des fonctions zêta et fonctions zêta p-adiques. **(80h:12009b)**
Daly, James E. Singular integral multipliers on local fields. **(80j:43005)**
Diamond, Jack On the values of p-adic L-functions at positive integers. **(80j:12013)**
Escassut, Alain p-adic transcendent type. I, II. **(80j:10041)**
Fabijańczyk, Andrzej Some remarks on non-Archimedean fields and non-Archimedean linear topological spaces. (Polish and Russian summaries) **(80g:46062)**
Osipov, Ju. V. p-adic zeta functions. (Russian) **(80j:12014)**
Perko, Richard Über partielle Differentialgleichungen von Briot-Bouquetschem Typ bei p-adisch bewertetem Grundkörper. **(80c:35021)**
van der Put, M. Finite-dimensional normed K-vectorspaces. **(80f:46064)**

12B45 Other nonanalytic theory

12B99 None of the above, but in this section

Jarden, Moshe An analogue of Artin-Schreier theorem. **80m:12018**

Secondary classifications:

Beckenstein, Edward *See* **Shell, Niel; et al., (80j:46119)**
Fresnel, Jean Produit tensoriel topologique des corps valués. **(80h:12012a)** Topological tensor products of p-adic fields. **(80h:12012b)**
Gallagher, Vincent P. Local trace forms. **(80g:10023)**
Narici, Lawrence *See* **Shell, Niel; et al., (80j:46119)**
Pfister, Albrecht Systems of quadratic forms. **(80j:10033)**
Shell, Niel (*with* Narici, Lawrence; Beckenstein, Edward) Locally compact non-Archimedean spaces. **(80j:46119)**

12Cxx Finite fields, and finite commutative rings (number-theoretic aspects)

12C05 Polynomials

Agou, Simon Irréductibilité des polynômes $f(X^{p^n} - aX^{p^r} - bX)$ sur un corps fini $\mathbf{F}_{p^s}$. **80d:12016**
Bose, N. K. *See* **Prabhu, K. A., 80m:12019**
Car, Mireille Normes dans $\mathbf{F}_q[X]$ de polynômes de $\mathbf{F}_{q^n}[X]$. (English summary) **80g:12016a**
Correction to: "Normes dans $\mathbf{F}_q[X]$ de polynômes de $\mathbf{F}_{q^n}[X]$" (C. R. Acad. Sci. Sér. A-B **288** (1979), no. 14, 669–672). **80g:12016b**
Carlitz, Leonard (*with* Lutz, Jo Ann) A characterization of permutation polynomials over a finite field. **80a:12022**
Polynomial characteristic functions for GF(p) and irregular primes. **80a:12023**
Chen, Ji Mian (*with* Li, Xi Min) The structure of the polynomials over the finite field defined by $Q\{f\}$-matrix. (Chinese) **80e:12021**
Cherly, J. A lower bound theorem in $F_q[x]$. **80e:12022**
Li, Xi Min *See* **Chen, Ji Mian, 80e:12021**
Lutz, Jo Ann *See* **Carlitz, Leonard, 80a:12022**
Mullen, Gary L. Weak equivalence of functions over a finite field. **80k:12028**
Prabhu, K. A. (*with* Bose, N. K.) Number of irreducible q-ary polynomials in several variables with prescribed degrees. **80m:12019**
Wesselkamper, T. C. The algebraic representation of partial functions. **80m:12020**

Secondary classifications:

Agou, Simon Irréductibilité des polynômes $f(X^{p^{2r}} - aX^{p^r} - bX)$ sur un corps fini $\mathbf{F}_{p^s}$. **(80k:12001)**
Brawley, J. V. A note on polynomial matrix functions over a finite field. **(80k:15020)**
Camion, P. Dix années de recherche sur les codes autoduaux. (English summary) **(80k:94025)**
Goss, David von Staudt for $\mathbf{F}_q[T]$. **(80a:12019)**
Lo, Siu Kwong *See* **Niederreiter, Harald, (80k:12002)**
Miller, Robert L. Necklaces, symmetries and self-reciprocal polynomials. **(80e:05017)**
Niederreiter, Harald (*with* Lo, Siu Kwong) Permutation polynomials over rings of algebraic integers. **(80k:12002)**
Sugimoto, Eiji A short note on new indexing polynomials of finite fields. **(80g:94062)**

12C10 Linear sequences

12C15 Arithmetic

Ralston, Tom On the distribution of squares in a finite field. **80i:12014**

Secondary classifications:

Tort, Jean-René Sur deux invariants d'un corps de niveau fini. **(80a:10035)**

12C20 Cyclotomy

Burde, Klaus Potenzen von Galoisfeldern. **80h:12017**
Myerson, Gerald On the numbers of zeros of diagonal cubic forms. **80e:12023**

Secondary classifications:

Evans, Ronald J. (*with* Hill, Jay Roderick) The cyclotomic numbers of order sixteen. **(80b:10053)**
Golomb, Solomon W. Cyclotomic polynomials and factorization theorems. **(80e:10011)**
Hill, Jay Roderick *See* **Evans, Ronald J., (80b:10053)**
Myerson, Gerald A combinatorial problem in finite fields. I. **(80i:05010)**

12C25 Exponential sums

Carlitz, Leonard A note on exponential sums. **80d:12017**

Secondary classifications:

Carlitz, Leonard Explicit evaluation of certain exponential sums. **(80j:10042)**
Helversen-Pasotto, Anna L'identité de Barnes pour les corps finis. **(80f:10047)**
Stepanov, S. A. An elementary method in algebraic number theory. (Russian) **(80c:10043)**

12C30 Structure theory

12C99 None of the above, but in this section

Claasen, H. L. The multiplications in GF(q)[x]/($a(x)$) considered as linear transformations. **80c:12025**

Secondary classifications:

Uziemblo, A. O. (*with* Żurawska, L.) Definability of functions on a finite set by means of compositions of addition and multiplication modulo some prime numbers. **(80i:10010)**
Żurawska, L. *See* **Uziemblo, A. O., (80i:10010)**

12Dxx Real and complex fields

12D05 Polynomials: factorization

Secondary classifications:

Anderson, Brian D. O. *See* **Bitmead, Robert R.; et al., (80a:15024)**
Bitmead, Robert R. (*with* Kung, Sun Yuan; Anderson, Brian D. O.; Kailath, Thomas) Greatest common divisors via generalized Sylvester and Bezout matrices. **(80a:15024)**
Kailath, Thomas *See* **Bitmead, Robert R.; et al., (80a:15024)**
Kung, Sun Yuan *See* **Bitmead, Robert R.; et al., (80a:15024)**

12D10 Polynomials: location of zeros (algebraic theorems) {For the analytic theory, see 26C10, 30C15.}

Drucker, Daniel S. A second look at Descartes' rule of signs. **80k:12029**
Haritonov, V. L. A generalization of a stability criterion. (Russian. Kazakh summary) **80a:12024**
Kozlowski, Andrzej Remark on systems of algebraic equations. (Polish summary) **80m:12021**
Rump, Siegfried M. Polynomial minimum root separation. **80d:12018**
Zaheer, Neyamat On generalized polars of the product of abstract homogeneous polynomials. **80d:12019**

Secondary classifications:

Datta, Biswa Nath An elementary proof of the stability criterion of Liénard and Chipart. **(80a:34058)**
Application of Hankel matrices of Markov parameters to the solutions of the Routh-Hurwitz and the Schur-Cohn problems. **(80k:15033)**
Guggenheimer, H. Bounds for roots of algebraic equations. **(80i:26018)**
Pratt, John W. Finding how many roots a polynomial has in (0, 1) or (0, ∞). **(80i:62088)**
Strahov, V. N. Solution of a direct two-dimensional gravimetry problem. (Russian) **(80i:86007)**
Young, N. J. Norms of certain rational functions of a matrix and Schur's criterion for polynomials. **(80d:15021)**

12D15 Formally real fields

Becker, Eberhard ★Hereditarily-Pythagorean fields and orderings of higher level. **80f:12021**
Otsuka, Kayo Some remarks on formally real fields. **80i:12015**
Prestel, Alexander Remarks on the Pythagoras and Hasse number of real fields. **80d:12020**
(*with* Ware, Roger) Almost isotropic quadratic forms. **80e:12024**
Ware, Roger *See* **Prestel, Alexander, 80e:12024**

Secondary classifications:

Becker, Eberhard Formal-reelle Körper mit streng-auflösbarer absoluter Galoisgruppe. **(80g:12017)**
Craven, Thomas C. Characterizing reduced Witt rings. II. **(80i:10025)**
Elman, R. (*with* Lam, T. Y.; Wadsworth, Adrian R.) Function fields of Pfister forms. **(80m:10017)**
(*with* Lam, T. Y.; Wadsworth, Adrian R.) Orderings under field extensions. **(80e:12029)**
Knebusch, Manfred (*with* Kolster, Manfred) ★Wittrings. (English) **(80e:10022)**
Kolster, Manfred *See* **Knebusch, Manfred, (80e:10022)**
Kula, Mieczysław Fields with prescribed quadratic form schemes. **(80f:10024)**
Lam, T. Y. *See* **Elman, R.; et al., (80e:12029)** *and* **Elman, R.; et al., (80m:10017)**
Marshall, Murray A. Quotients and inverse limits of spaces of orderings. **(80f:10021)**

Classification of finite spaces of orderings. **(80f:10026)**
Mettenborg, Marlies Beantwortung einer Frage von J. Arason und A. Pfister als Korollar eines Ergebnisses von L. Bröcker. **(80j:10029)**
Wadsworth, Adrian R. *See* **Elman, R.; et al., (80e:12029)** *and* **Elman, R.; et al., (80m:10017)**
Ware, Roger Quadratic forms and profinite 2-groups. **(80f:10025)**

12D99 None of the above, but in this section

Bochnak, Jacek Sur le 17ème problème de Hilbert pour les fonctions de Nash. (English summary) **80d:12021**

Secondary classifications:

Greither, Cornelius Struktur und Transzendenzgrad von η_{n+1}-Körpern und Ultrapotenzen von Körpern. **(80f:12028)**
Lenormand, Claude Polynômes classiques en variables non commutatives. **(80k:33021)**
Robbin, Joel W. Evaluation fields for power series. I. The nullstellensatz. **(80m:13006a)** Evaluation fields for power series. II. The reelnullstellensatz. **(80m:13006b)**

12Exx General field theory

12E05 Polynomials (irreducibility, etc.)

Brenner, Andrew (*with* Morton, Patrick) Polynomial relations in characteristic p. **80a:12025**
Morton, Patrick *See* **Brenner, Andrew, 80a:12025**
Smith, John H. Erratum to: "General trinomials having symmetric Galois group" [Proc. Amer. Math. Soc. **63** (1977), no. 2, 208–212; MR **55** #10433]. **80m:12022**
Stoyle, P. N. R. *See* **Vardulakis, A. I. G., 80e:12025**
Vardulakis, A. I. G. (*with* Stoyle, P. N. R.) Generalized resultant theorem. **80e:12025**

Secondary classifications:

Brizolis, Demetrios A theorem on ideals in Prüfer rings of integral-valued polynomials. **(80j:13013)**
Golomb, Solomon W. Cyclotomic polynomials and factorization theorems. **(80e:10011)**
Razar, Michael Polynomial maps with constant Jacobian. **(80m:14009)**

12E10 Special polynomials

Gay, David A. (*with* Vélez, William Yslas) On the degree of the splitting field of an irreducible binomial. **80e:12026**
On normal radical extensions of real fields. **80m:12023**
Vélez, William Yslas *See* **Gay, David A., 80e:12026**

Secondary classifications:

Head, A. K. The Galois unsolvability of the sextic equation of anisotropic elasticity. **(80c:73014)**
Winograd, S. On multiplication in algebraic extension fields. **(80e:68081)**

12E12 Equations

Secondary classifications:

Green, Mark L. On the analytic solution of the equation of fifth degree. **(80c:14021)**
Kozłowski, Andrzej Remark on systems of algebraic equations. (Polish summary) **(80m:12021)**

12E15 Skew fields, division rings [See also 12A80, 12B35, 16A39.]

Heimbeck, Günter Bemerkung zu einem Satz von Baer. (English summary) **80m:12024**

Secondary classifications:

Heuser, Ansgar Über den Funktionenkörper der Normfläche einer zentral einfachen Algebra. **(80k:16009)**
Koch, Helmut Representations of the Galois group and of the multiplicative groups of skew fields over local fields. (Russian) **(80j:12010)**

12E99 None of the above, but in this section

Vantieghem, E. On fields with an exponentiation. **80m:12025**

12Fxx Field extensions

12F05 Algebraic extensions

Cohn, P. M. On the decomposition of a field as a tensor product. **80m:12026**
Evans, Ronald J. (*with* Isaacs, I. M.) Fields generated by linear combinations of roots of unity. II. **80k:12030**
Isaacs, I. M. *See* **Evans, Ronald J., 80k:12030**
Norris, Michael J. (*with* Vélez, William Yslas) A characterization of the splitting of inseparable algebraic extensions. **80h:12018**
Vélez, William Yslas *See* **Norris, Michael J., 80h:12018**

12F10 Separable extensions, Galois theory

Becker, Eberhard Formal-reelle Körper mit streng-auflösbarer absoluter Galoisgruppe. **80g:12017**
Cohen, S. D. Composite rational functions which are powers. **80k:12031**
Girstmair, Kurt Über konstruktive Methoden der Galoistheorie. (English summary) **80b:12016**
Lewis, D. J. (*with* Morton, Patrick) On normal closures related to elliptic curves. **80b:12017**
Morton, Patrick *See* **Lewis, D. J., 80b:12017**
Vámos, P. On the minimal prime ideal of a tensor product of two fields. **80j:12016**

Secondary classifications:

Jarden, Moshe An analogue of Artin-Schreier theorem. **(80m:12018)**
Perrin-Riou, Bernadette Plongements d'extensions galoisiennes. **(80g:12003)**
Schuppar, Berthold Elementare Aussagen zur Arithmetik und Galoistheorie von Funktionenkörpern. **(80m:12011)**

12F15 Inseparable extensions, derivations

Deveney, James K. (*with* Mordeson, John N.) On Galois theory using pencils of higher derivations. **80g:12018**
(*with* Mordeson, John N.) Pencils of higher derivations of arbitrary field extensions. **80f:12022**
(*with* Mordeson, John N.) Invariance in inseparable Galois theory. **80f:12023**
Mordeson, John N. *See* **Deveney, James K., 80f:12022; Deveney, James K., 80f:12023** *and* **Deveney, James K., 80g:12018**

Secondary classifications:

Body, Richard (*with* Douglas, Roy) Tensor products of graded algebras and unique factorization. **(80h:16002)**
Douglas, Roy *See* **Body, Richard, (80h:16002)**

12F20 Transcendental extensions

Berndt, Rolf Arithmetisch ganze Differentiale. **80f:12024**
van Deuren, Jean-Pierre Étude du degré de transcendance des sous-corps commutatifs des corps de fractions des anneaux d'opérateurs différentiels à coefficients dans un corps commutatif de caractéristique nulle. (English summary) **80a:12026**
Fein, Burton (*with* Schacher, Murray) Ulm invariants of the Brauer group of a field. II. **80a:12027**
(*with* Schacher, Murray; Sonn, Jack) Brauer groups of rational function fields. **80b:12019**
Fried, Michael D. (*with* Jarden, Moshe) Diophantine properties of subfields of $\bar{Q}$. **80e:12027**
Jarden, Moshe *See* **Fried, Michael D., 80e:12027**
Schacher, Murray *See* **Fein, Burton, 80a:12027** *and* **Fein, Burton; et al., 80b:12019**
Sonn, Jack *See* **Fein, Burton; et al., 80b:12019**
Staut, W. Maximale Ideale von k-Algebren und Systeme 2-rangiger Stellen in algebraischen Funktionenkörpern. **80f:12025**

12F99 None of the above, but in this section

Jarden, Moshe Torsion in linear algebraic groups over large algebraic fields. **80m:12027**

Secondary classifications:

Elman, R. (*with* Lam, T. Y.; Wadsworth, Adrian R.) Orderings under field extensions. **(80e:12029)**
Lam, T. Y. *See* **Elman, R.; et al., (80e:12029)**
Wadsworth, Adrian R. *See* **Elman, R.; et al., (80e:12029)**

12Gxx Homological methods

12G05 Galois cohomology [See also 12A60, 12B20, 13A20, 16A16.]

Würfel, Tilmann Un critère de liberté pour les pro-p-groupes et la structure du groupe de Brauer. (English summary) **80d:12022**

Secondary classifications:

Arason, Jón Kr. Wittring und Galoiscohomologie bei Charakteristik 2. **(80f:10020)**
Ch'ên, Yung Ch'iu Corrigendum to the paper: "On Demushkin groups and their Schur multiplicators" (Chinese J. Math. **5** (1977), no. 2, 107–112). **(80e:12020)**
Čistov, A. L. The number of generators of the semigroup of stable equivalence classes of algebraic tori. (Russian) **(80b:14012)**
Merkur'ev, A. S. A seven-term sequence in the Galois theory of schemes. (Russian) **(80j:14040)**
Nguyen-Quang-Do Thong Sur le multiplicateur de Schur d'un p-groupe. **(80c:20014)**

12G10 Cohomological dimension

12G99 None of the above, but in this section

Šestakova, G. P. The homological determination of torsion modules. (Russian) **80b:12020**

12Hxx Differential and difference algebra

12H05 Differential algebra [See also 13N05.]

Caviness, B. F. *See* **Epstein, H. I., 80k:12032** *and* **Rothstein, Michael, 80m:12028**

Epstein, H. I. (*with* Caviness, B. F.) A structure theorem for the elementary functions and its application to the identity problem. **80k:12032**
Johnson, Joseph *See* **Sit, William, 80m:12029**
Lequain, Yves Differential simplicity in regular local rings. **80c:12026**
Levelt, A. H. M. A descent theorem for differential operators of the first kind. **80k:12021**
Matsuda, Michihiko The group of automorphisms of a differential algebraic function field. **80k:12022**
Ōtsubo, Shūji Solutions of an algebraic differential equation of the first order in a Liouvillian extension of the coefficient field. **80c:12027**
Perko, Richard Zur algebraischen Theorie der Lösungen schwach singulärer linearer Differentialgleichungen im Körper der Laurentreihen über einen Körper positiver Charakteristik unter Zugrundelegung einer nicht-iterativen Differentiation. (English summary) **80k:12023**
Eine Verallgemeinerung der Riccatischen Differentialgleichung in Körpern der Charakteristik $p=2$. **80g:12019**
Rehm, Hans Peter Galois groups and elementary solutions of some linear differential equations. **80d:12023**
Rothstein, Michael (*with* Caviness, B. F.) A structure theorem for exponential and primitive functions. **80m:12028**
Sit, William (*with* Johnson, Joseph) On the differential transcendence polynomials of finitely generated differential field extensions. **80m:12029**
Tretkoff, Carol (*with* Tretkoff, Marvin) Solution of the inverse problem of differential Galois theory in the classical case. **80k:12033**
Tretkoff, Marvin *See* **Tretkoff, Carol, 80k:12033**
Wu, Wen Jun Mechanical theorem proving in elementary differential geometry. (Chinese) **80e:12028**

Secondary classifications:

Bank, Steven B. An extension of Hardy's theorem on solutions of algebraic differential equations. **(80c:34028)**
Berg, Lothar Construction of distribution algebras. **(80j:46064)**
Cassidy, Phyllis Joan Unipotent differential algebraic groups. **(80m:14033)**
Dabèche, A. Formes canoniques rationnelles d'un système différentiel à point singulier irrégulier. **(80m:34003)**
Ennolem, Jacques Géométrie des points épais. (English summary) **(80j:14008)**
Kaplan, James L. (*with* Yorke, James A.) Nonassociative, real algebras and quadratic differential equations. **(80d:58060)**
Nowicki, Andrzej Radical irregularity of some polynomial rings. **(80h:13007)**
Poizat, Bruno Rangs des types dans les corps différentiels. **(80c:03036)**
Singer, Michael F. The model theory of ordered differential fields. **(80a:03044)**
Yorke, James A. *See* **Kaplan, James L., (80d:58060)**

12H10 Difference algebra [See also 39Axx.]

12H20 Abstract differential equations [See also 34Gxx.]

12H25 p-adic differential equations [See also 12B40, 14G20, 34Gxx.]

12H99 None of the above, but in this section

12Jxx Topological fields

12J05 Normed fields

Barot, Jiří A multiplicative functional on the commutative topological field. **80b:12018**

12J10 Valued fields [See also 10M10.]

Basarab, Şerban A. Quelques propriétés modèle-théoriques des corps valués henseliens. (English summary) **80e:12028**
Bastos, Gervásio G. Valued fields with fundamental equality. **80l:12016**
Some results on the degree of imperfection of complete valued fields. **80a:12029**
Transier, René Verallgemeinerte formal p-adische Körper. **80m:12030**

Secondary classifications:

Becker, Eberhard Summen n-ter Potenzen in Körpern. **(80k:12034)**
Endler, Otto On Henselian valuations. (Portuguese) **(80k:12035)**

12J15 Ordered fields [See also 10M15.]

Becker, Eberhard Summen n-ter Potenzen in Körpern. **80k:12034**
Elman, R. (*with* Lam, T. Y.; Wadsworth, Adrian R.) Orderings under field extensions. **80e:12029**
Gutiérrez Novoa, Lino Order characterization of the complex field. **80c:12028**
Lam, T. Y. *See* **Elman, R.; et al., 80e:12029**
Wadsworth, Adrian R. *See* **Elman, R.; et al., 80e:12029**

12J17 Topological semi-fields

12J20 General valuation theory

Bastos, Gervásio G. A generalization of Krasner's lemma and its application to the study of solvable $(\varphi^1, \cdots, \varphi^k)$-prescripti ons. (Portuguese) **80e:12030**
Endler, Otto On Henselian valuations. (Portuguese) **80k:12035**
Nagata, Masayoshi A generalization of the notion of a valuation. **80l:12017**
Theeis, Michael Bewertete Vektorräume und pseudovollständige Körper. **80k:12036**
Törner, Günter Bewertungsringe. **80e:12031**
Weber, Hans Charakterisierung der lokalbeschränkten Ringtopologien auf globalen Körpern. **80g:12020**
Topologische Charakterisierung globaler Körper und algebraischer Funktionenkörper in einer Variablen. **80k:12037**

12J25 Non-Archimedean valued fields [See also 26E30, 30G05, 32D25, 46P05.]

Secondary classifications:

Natarajan, P. N. Multiplication of series with terms in a non-Archimedean field. **(80c:12024)**
Obiedu, E. U. On local compactness in non-Archimedean normed linear spaces. **(80c:46073)**

12J27 Krasner-Tate algebras [See mainly 32E27, also 46P05.]

Morita, Yasuo Krasner's analytic functions and rigid analytic spaces. **80e:12032**

12J99 None of the above, but in this section

Radó, F. A generalization of the valued vector space. **80c:12029**
Więsław, Witold A characterization of locally compact fields. III. **80f:12026**
Locally bounded topologies on some Dedekind rings. **80k:12038**

Secondary classifications:

Prestel, Alexander (*with* Ziegler, Martin) Model-theoretic methods in the theory of topological fields. **(80f:54034)**
Weber, Hans Charakterisierung der lokalbeschränkten Ringtopologien auf globalen Körpern. **(80g:12020)**
Topologische Charakterisierung globaler Körper und algebraischer Funktionenkörper in einer Variablen. **(80k:12037)**
Ziegler, Martin *See* **Prestel, Alexander, (80f:54034)**

12Kxx Generalizations

12K05 Near-fields [See also 16A76.]

Groves, Susan Dancs Locally finite near-fields. **80f:12027**

Secondary classifications:

Caggegi, Andrea Generalized André planes. (Italian. English summary) **(80l:51005)**
Kallaher, Michael J. (*with* Ostrom, T. G.) Bol quasifields and generalized André systems. **(80h:51015)**
Ostrom, T. G. *See* **Kallaher, Michael J., (80h:51015)**

12K10 Semi-fields [See also 16A78.]

12K99 None of the above, but in this section

12Lxx Connections with logic

12L05 Decidability

Denef, J. (*with* Lipshitz, L.) Diophantine sets over some rings of algebraic integers. **80a:12030**
Lipshitz, L. *See* **Denef, J., 80a:12030**

Secondary classifications:

Brown, Scott Shorey Bounds on transfer principles for algebraically closed and complete discretely valued fields. **(80j:03045)**
Roman'kov, V. A. Universal theory of nilpotent groups. (Russian) **(80j:03058)**

12L10 Ultraproducts

Kiehne, Ursel Bounded products in the theory of valued fields. **80l:12018**

Secondary classifications:

Kiehne, Ursel Zeros of polynomials over valued fields. **(80f:12019)**
Klingen, Norbert Zur Modelltheorie lokaler und globaler Körper. **(80a:12015)**
Transier, René Verallgemeinerte formal p-adische Körper. **(80m:12030)**

12L15 Nonstandard arithmetic [See also 03H15.]

Greither, Cornelius Struktur und Transzendenzgrad von η_{n+1}-Körpern und Ultrapotenzen von Körpern. **80f:12028**

Secondary classifications:

Klingen, Norbert Zur Modelltheorie lokaler und globaler Körper. **(80a:12015)**
Penzin, Ju. G. The problem of twins in formal arithmetic. (Russian) **(80m:03115)**

12L99 None of the above, but in this section

Secondary classifications:

Hickman, John L. Dedekind-finite fields. **(80d:03049)**
Wheeler, William H. Amalgamation and elimination of quantifiers for theories of fields. **(80j:03049)**

13-XX COMMUTATIVE RINGS AND ALGEBRAS {For the noncommutative case, see 16-XX.}

13-01 Elementary exposition, textbooks

13-02 Advanced exposition (research surveys, monographs, etc.)

Bass, Hyman ★Projective modules and symmetric algebras. **80f:13001**

Secondary classifications:

Problems:
Module theory Problems. **(80k:16003)**

13-03 Historical (must also be assigned at least one classification number from Section 01)

13-04 Explicit machine computation and programs (not the theory of computation or programming)

13-06 Proceedings, conferences, etc.

(Malliavin-Brameret, Marie-Paule) *See* **Séminaire: Algèbre Paul Dubreil, 80m:13001**
Algebra *See* **Séminaire: Algèbre Paul Dubreil, 80m:13001**
Paris *See* **Séminaire: Algèbre Paul Dubreil, 80m:13001**
Séminaire:
Dubreil, P. *See* **Séminaire: Algèbre Paul Dubreil, 80m:13001**
Algèbre Paul Dubreil ★Séminaire d'Algèbre Paul Dubreil, 31ème année. **80m:13001**

13Axx General commutative ring theory

13A05 Divisibility

Shimoda, Yasuhiro The class group of the Rees algebras over polynomial rings. **80h:13001**

Secondary classifications:

Močkoř, Jiří Topological groups of divisibility. **(80f:06016)**

13A10 Radical theory

Verra, Alessandro The pseudoradical and Jacobson radical of a scheme. (Italian. English summary) **80c:13001**

13A15 Ideals

Chabert, Jean-Luc Polynômes à valeurs entières et propriété de Skolem. **80d:13001**
Fischer, Thomas S. The prime spectrum of a Bézout ring. **80a:13001**
Heitmann, Raymond C. Examples of noncatenary rings. **80c:13002**
Mezzetti, Emilia (*with* Spangher, Walter) Some criteria for extending arithmetic properties under the operation of projective closure. (Italian. English summary) **80h:13002**
Smith, William W. Invertible ideals and overrings. **80f:13001a**
Erratum to: "Invertible ideals and overrings" [Houston J. Math. **5** (1979), no. 1, 141–153; MR 80f:13001]. **80f:13001b**
Spangher, Walter *See* **Mezzetti, Emilia, 80h:13002**
Valla, Giuseppe Remarks on generalized analytic independence. **80b:13001**

Secondary classifications:

Johnson, Jon L. Modules injective with respect to primes. **(80k:16039)**
Ratliff, Louis J., Jr. Note on simple integral extension domains and maximal chains of prime ideals. **(80h:13009)**
Vaughan, N. H. (*with* Yeagy, R. W.) Factoring ideals into semiprime ideals. **(80a:13023)**
Yeagy, R. W. Semiprime factorizations in unions of Dedekind domains. **(80j:13014)**
See also **Vaughan, N. H., (80a:13023)**

13A17 Prime and primary ideals and their generalizations

Dutton, P. Prime ideals attached to a module. **80c:13003**
Fischer, Thomas S. The maximal ideal space of a Bézout ring. **80b:13002**

Secondary classifications:

Canonero, Gabriella Observations on certain algebraic curves belonging to a quadric cone. (Italian. English summary) **(80h:14024)**
Le Donne, Attilio On prime ideals of $C(X)$. **(80k:54027)**
Mok, T. T. On generators of ideals. **(80g:14029)**

13A18 Valuations and their generalizations

Orbanz, Ulrich Valuation semigroups and closed components. **80f:13002**

Secondary classifications:

Törner, Günter Bewertungsringe. **(80e:12031)**

13A20 Brauer groups [See also 12Gxx, 16A16.]

Hattori, Akira On groups $H^n(S/R)$ related to the Amitsur cohomology and the Brauer group of commutative rings. **80h:13003**

Secondary classifications:

Fein, Burton (*with* Schacher, Murray) Ulm invariants of the Brauer group of a field. II. **(80a:12027)**
(*with* Schacher, Murray; Sonn, Jack) Brauer groups of rational function fields. **(80k:12019)**
Mollin, Richard Uniform distribution classified. **(80i:12011)**
Nyman, T. (*with* Whaples, G.) Hasse's principle for simple algebras over function fields of curves. I. Algebras of index 2 and 3; curves of genus 0 and 1. **(80a:14013a)**
(*with* Whaples, G.) Correction to the paper: "Hasse's principle for simple algebras over function fields of curves. I" (J. Reine Angew. Math. **299/300** (1978), 396–405). **(80a:14013b)**
Schacher, Murray *See* **Fein, Burton, (80a:12027)** *and* **Fein, Burton; et al., (80k:12019)**
Sonn, Jack *See* **Fein, Burton; et al., (80k:12019)**
Whaples, G. *See* **Nyman, T., (80a:14013a)** *and* **Nyman, T., (80a:14013b)**

13A99 None of the above, but in this section

Doretti, Lucia Direct and inverse limits of generalized Euclidean and strong valuation rings. (Italian. English summary) **80e:13001**
Harada, Manabu On the small hulls of a commutative ring. **80a:13002**
Kirby, D. Subrings of the first neighbourhood ring. **80k:13001**

Secondary classifications:

Griffith, Phillip Completions of rings of invariants and their divisor class groups. **(80a:20042)**
Knebusch, Manfred (*with* Kolster, Manfred) ★Wittrings. (English) **(80e:10022)**
Kolster, Manfred *See* **Knebusch, Manfred, (80e:10022)**

13Bxx Ring extensions and related topics

13B02 Extension theory

Dobbs, David E. Coherence, ascent of going-down, and pseudo-valuation domains. **80a:13003**
Lissner, David (*with* Lønsted, Knud) Reduction of projective modulus in ring extensions. **80c:13004**
Lønsted, Knud *See* **Lissner, David, 80c:13004**
Papick, Ira J. Finite type extensions and coherence. **80b:13003**
Uda, Hirobumi Incomparability in ring extensions. **80h:13004**

Secondary classifications:

Orbanz, Ulrich Valuation semigroups and closed components. **(80f:13002)**

13B05 Galois theory

Kanzaki, Teruo On the category of commutative algebras split by a faithfully flat extension. **80b:13004**
Kersten, Ina Konstruktion von zusammenhängenden galoisschen Algebren der Charakteristik p^k zu vorgegebener Gruppe der Ordnung p^l. **80f:13003**

Secondary classifications:

Mollin, Richard Uniform distribution classified. **(80i:12011)**

13B10 Automorphisms and derivations

Brown, William C. Differentially simple rings. **80j:13001**
On the imbedding of derivations of finite rank into derivations of infinite rank. **80h:13005**
Lequain, Yves Regular rings, differentially simple rings. (Portuguese) **80j:13002**
Nakai, Yoshikazu On locally finite iterative higher derivations. **80h:13006**
Platte, Erich Ein elementarer Beweis des Zariski-Lipman-Problems für graduierte analytische Algebren. **80c:13005**
Scheja, Günter (*with* Storch, Uwe) Fortsetzung von Derivationen. **80a:13004**
Seibt, Peter Differential filtrations and symbolic powers of regular primes. **80g:13001**
Storch, Uwe *See* **Scheja, Günter, 80a:13004**

13B15 Ramification theory

13B20 Integral dependence; integral closure; integrally closed rings, related rings (Japanese, etc.)

Becker, Joseph Higher derivations and integral closure. **80a:13005**
Brewer, J. W. (*with* Costa, D. L.; McCrimmon, K.) Seminormality and root closure in polynomial rings and algebraic curves. **80e:13002**
Costa, D. L. *See* **Brewer, J. W.; et al., 80e:13002**
Fujita, Kazunori Minimal prime ideals of a finitely generated ideal. **80i:13002**
Langmann, Klaus (*with* Rotthaus, Christel) Über den regulären Ort bei japanischen lokalen Ringen. (English summary) **80e:13003**

Lipman, Joseph Rings with discrete divisor class group: theorem of Danilov-Samuel. **80g:13002**
Marot, Jean Limite inductive plate de P-anneaux. **80h:13008**
McCrimmon, K. *See* **Brewer, J. W.; et al., 80e:13002**
Mok, T. T. On a normalization lemma for integers and an application of four colors theorem. **80f:13004**
Nishimura, Jun-ichi On ideal transforms of Noetherian rings. **80f:13005**
Querré, Julien Sur les anneaux complètement intégralement clos. **80d:13002**
Sur la clôture intégrale des anneaux intègres noethériens. (English summary) **80e:13004**
Ratliff, Louis J., Jr. Note on simple integral extension domains and maximal chains of prime ideals. **80h:13009**
Rotthaus, Christel *See* **Langmann, Klaus, 80e:13003**

Secondary classifications:

Burch, A. Lindsay A theorem on integral closures of ideals in semi-local rings. **(80b:13010)**
Ratliff, Louis J., Jr. Two theorems on the prime divisors of zeros in completions of local domains. **(80k:13009)**
Rotthaus, Christel Universell japanische Ringe mit nicht offenem regulärem Ort. **(80k:14007)**

13B25 Polynomials over commutative rings

Gilmer, Robert (*with* Heinzer, William) The Noetherian property for quotient rings of infinite polynomial rings. **80h:13010**
Hadnagy, A. *See* **Izverceanu, P. N., 80k:15043**
Heinzer, William *See* **Gilmer, Robert, 80h:13010**
Izverceanu, P. N. (*with* Hadnagy, A.) Sur une classe des algèbres polynomiales. **80k:15043**
Nagano, Yoshihiko On locally polynomial rings. (Japanese summary) **80j:13003**
Ratliff, Louis J., Jr. $A(X)$ and GB-Noetherian rings. **80h:13011**
Rush, David E. Pic(R) and the R-flatness of $R[X]/I$. **80h:13012**

Secondary classifications:

Brewer, J. W. (*with* Costa, D. L.; McCrimmon, K.) Seminormality and root closure in polynomial rings and algebraic curves. **(80e:13002)**
Brizolis, Demetrios A theorem on ideals in Prüfer rings of integral-valued polynomials. **(80j:13013)**
Cahen, P. J. Fractions rationnelles à valeurs entières. **(80e:12001)**
Chabert, Jean-Luc Polynômes à valeurs entières et propriété de Skolem. **(80d:13001)**
Costa, D. L. *See* **Brewer, J. W.; et al., (80e:13002)**
Fujita, Takao On Zariski problem. **(80j:14029)**
Goss, David von Staudt for $\mathbf{F}_q[T]$. **(80a:12019)**
Kambayashi, T. (*with* Miyanishi, Masayoshi) On flat fibrations by the affine line. **(80f:14028)**
Lausch, Hans (*with* Nöbauer, Wilfried) Local polynomial functions on factor rings of the integers. **(80g:08008)**
McCrimmon, K. *See* **Brewer, J. W.; et al., (80e:13002)**
Miyanishi, Masayoshi *See* **Kambayashi, T., (80f:14028)**
Nöbauer, Wilfried On semigroups and groups of local polynomial functions. **(80k:20068)**
See also **Lausch, Hans, (80g:08008)**
Prószyński, Andrzej Some functors related to polynomial theory. II. **(80j:13012)**
Russell, Peter (*with* Sathaye, Avinash) On finding and cancelling variables in $k[X, Y, Z]$. **(80j:14030)**
Sathaye, Avinash *See* **Russell, Peter, (80j:14030)**
Smith, John H. Erratum to: "General trinomials having symmetric Galois group" [Proc. Amer. Math. Soc. **63** (1977), no. 2, 208–212; MR 55 #10433]. **(80m:12022)**
Viry, Guy Factorisation des polynômes à plusieurs variables à coefficients entiers. **(80g:94056)**

13B30 Quotients and localization

Spulber, Dorian TP-rings. **80a:13006**

Secondary classifications:

Halanay, Elena An example of a unique factorization domain whose completion is not a unique factorization domain. (Romanian. English summary) **(80a:13017)**

13B99 None of the above, but in this section

Hays, James H. The S-transform and the ideal transform. **80l:13003**

Secondary classifications:

Brewer, J. W. (*with* Costa, D. L.) Seminormality and projective modules over polynomial rings. **(80e:13008)**
Costa, D. L. *See* **Brewer, J. W., (80e:13008)**

13Cxx Theory of modules and ideals

13C05 Structure, classification theorems

Brandal, Willy ★Commutative rings whose finitely generated modules decompose. **80g:13003**
Camillo, Victor Homological independence of injective hulls of simple modules over commutative rings. **80a:13007**
Dade, Everett C. Endo-permutation modules over p-groups. I. **80a:13008a**
Endo-permutation modules over p-groups. II. **80a:13008b**
Mehdi, Fazal *See* **Singh, Surjeet, 80f:13006**
Oshiro, Kiyoichi Thin patches and semiprime FGC-rings. **80k:13002**
Singh, Surjeet (*with* Mehdi, Fazal) Multiplication modules. **80f:13006**

Secondary classifications:

Dutton, P. Prime ideals attached to a module. **(80c:13003)**
Fischer, Thomas S. The prime spectrum of a Bézout ring. **(80a:13001)**
Green, Edward L. (*with* Reiner, Irving) Integral representations and diagrams. **(80g:16032)**
Ischebeck, Friedrich Zum Verhalten der Picardgruppe eines Tensorproduktes bei Erweiterung eines Faktors. **(80j:14007)**
Poli, Alain Une famille de codes généralisant les codes minimaux (cas semi-simple ou modulaire). **(80m:94053)**
Reiner, Irving *See* **Green, Edward L., (80g:16032)**

13C10 Projective and free modules and ideals [See also 18G05.]

Bijan-Zadeh, Mohammad H. Torsion theories and local cohomology over commutative and Noetherian rings. **80h:13013**
Borsztyński, M. A note on set-theoretic complete intersection ideals. **80c:13006**
When is an ideal generated by a regular sequence? **80e:13005**
Brewer, J. W. (*with* Costa, D. L.) Projective modules over some non-Noetherian polynomial rings. **80a:13009**
Costa, D. L. *See* **Brewer, J. W., 80a:13009**
Hiremath, V. A. Finitely projective modules over a Dedekind domain. **80a:13010**
Kang, Ming Chang Projective modules over some polynomial rings. **80j:13004**
Knörr, Reinhard Relative projective covers. **80e:13006**
Naoum, A. G. Quasi invertible ideals and projective ideals. (Arabic summary) **80d:13001**
Roitman, Moshe On projective modules over polynomial rings. **80g:13004**
Zöschinger, Helmut Invarianten wesentlicher Überdeckungen. **80a:13011**

Secondary classifications:

Brewer, J. W. (*with* Costa, D. L.) Seminormality and projective modules over polynomial rings. **(80e:13008)**
Costa, D. L. *See* **Brewer, J. W., (80e:13008)**
Heinrich, E. Die Picardgruppen affinoider Algebren und ihrer affinen Reduktionen. **(80c:32030)**
Lipman, Joseph Rings with discrete divisor class group: theorem of Danilov-Samuel. **(80g:13002)**
Lissner, David (*with* Lønsted, Knud) Reduction of projective modulus in ring extensions. **(80c:13004)**
Lønsted, Knud *See* **Lissner, David, (80c:13004)**
Ojanguren, Manuel Formes quadratiques sur les algèbres de polynomes. (English summary) **(80a:15028)**
Paques, Antonio Sur la cohomologie des formes quadratiques. **(80k:15038)**
Wright, David Lee The amalgamated free product structure of $GL_2(k[X_1, \cdots, X_n])$ and the weak Jacobian theorem for two variables. **(80a:20049)**

13C11 Injective and flat modules and ideals [See also 18G05.]

Irving, Ronald S. Generic flatness and the Nullstellensatz for Ore extensions. **80b:13005**

Secondary classifications:

Smith, William W. Invertible ideals and overrings. **(80f:13001a)**
Erratum to: "Invertible ideals and overrings" [Houston J. Math. **5** (1979), no. 1, 141–153; MR 80f:13001]. **(80f:13001b)**

13C12 Torsion modules and ideals

Porter, Timothy Stability of algebraic inverse systems. I. Stability, weak stability and the weakly-stable socle. **80c:13007**

Secondary classifications:

Oshiro, Kiyoichi Thin patches and semiprime FGC-rings. **(80k:13002)**

13C13 Other special types

Repnickiĭ, V. B. Arithmetic modules. (Russian) **80m:13002**
Webb, Cary Tensor products of separable reduced primary modules. **80j:13005**

Secondary classifications:

Mehdi, Fazal *See* **Singh, Surjeet, (80f:13006)**
Porter, Timothy Stability of algebraic inverse systems. I. Stability, weak stability and the weakly-stable socle. **(80c:13007)**
Singh, Surjeet (*with* Mehdi, Fazal) Multiplication modules. **(80f:13006)**
Valla, Giuseppe Remarks on generalized analytic independence. **(80b:13001)**

13C15 Dimension theory, depth, related rings (catenary, etc.)

Brodmann, M. On some results of L. J. Ratliff. **80a:13012**
Cavaliere, Maria Pia Maximal homogeneous A-sequences in a graded ring. (Italian. English summary) **80j:13006**
Hochster, Melvin Principal ideal theorems. **80k:13003**
Matlis, Eben The higher properties of R-sequences. **80a:13013**
Mohan Kumar, N. On two conjectures about polynomial rings. **80c:13010**

Muhamedov, V. G. The behavior of the Krull dimension of a commutative algebra in the case of extension of the base field. (Russian) **80b:13006**
Pettit, M. E., Jr. *See* **Ratliff, Louis J., Jr., 80k:13004**
Ratliff, Louis J., Jr. ★Chain conjectures in ring theory. **80c:13008**
(*with* Pettit, M. E., Jr.) Characterizations of H_1-local rings and of C_1-local rings. **80k:13004**
Rossi, Maria Evelina Height and dimension of a graded ring associated with an ideal. (Italian. English summary) **80d:13004**
Sathaye, Avinash On the Forster-Eisenbud-Evans conjectures. **80c:13009**
Wadsworth, Adrian R. The Krull dimensions of tensor products of commutative algebras over a field. **80h:13014**

Secondary classifications:

Arnold, J. T. (*with* Boisen, M. B., Jr.) Abnormalities in Noetherian rings. **(80b:13007)**
Boisen, M. B., Jr. *See* **Arnold, J. T., (80b:13007)**
Brewer, J. W. (*with* Costa, D. L.) Projective modules over some non-Noetherian polynomial rings. **(80a:13009)**
Chow, Wei Liang On the algebraicity of certain ringed spaces. **(80d:32030)**
Costa, D. L. *See* **Brewer, J. W., (80a:13009)**
Heitmann, Raymond C. Examples of noncatenary rings. **(80c:13002)**
Józefiak, Tadeusz Ideals generated by minors of a symmetric matrix. **(80g:14041)**
Kirby, D. Subrings of the first neighbourhood ring. **(80k:13001)**
Ratliff, Louis J., Jr. Two theorems on the prime divisors of zeros in completions of local domains. **(80k:13009)**
$A(X)$ and GB-Noetherian rings. **(80h:13011)**

13C99 None of the above, but in this section

Secondary classifications:

Bruns, W. Basische Elemente in Steinschen Moduln. (English summary) **(80g:32031)**
Ferrero, Miguel (*with* Micali, Artibano) Sur les n-applications. **(80j:10032)**
Griffith, Phillip Maximal Cohen-Macaulay modules and representation theory. **(80a:13024)**
Micali, Artibano *See* **Ferrero, Miguel, (80j:10032)**
Weyman, Jerzy Resolutions of the exterior and symmetric powers of a module. **(80i:13005)**

13Dxx Homological methods

13D03 Cohomology of commutative rings and algebras

Suzuki, Naoyoshi On the generalized local cohomology and its duality. **80f:13004**

Secondary classifications:

Hattori, Akira On groups $H^n(S/R)$ related to the Amitsur cohomology and the Brauer group of commutative rings. **(80h:13003)**

13D05 Homological dimension

Herzog, Jürgen (*with* Steurich, Manfred) Golodideale der Gestalt $a \cap b$. **80g:13005**
Lăcoiu, Dorian Sur la dimension homologique des modules. (English summary) **80g:13006**
Marinov, V. P. Perfection of ideals generated by Pfaffians of alternating matrices. **80j:13007**
Steurich, Manfred *See* **Herzog, Jürgen, 80g:13005**
Vasconcelos, Wolmer V. On the homology of I/I^2. **80a:13014**

Secondary classifications:

Rosenberg, Alex La dimension globale d'extensions d'Ore. **(80f:16032)**

13D10 Deformations and infinitesimal methods [See also 14D15, 16A58, 32Gxx.]

Golod, E. S. Homology of some local rings. (Russian) **80a:13015**

Secondary classifications:

Verra, Alessandro The pseudoradical and Jacobson radical of a scheme. (Italian. English summary) **(80c:13001)**

13D15 Grothendieck group, K-theory [See also 14F15, 18F25, 18F30.]

Anderson, David F. Projective modules over subrings of $k[X, Y]$ generated by monomials. **80g:13007**
Charney, Ruth M. Homology stability of GL_n of a Dedekind domain. **80f:13007**
Dayton, Barry H. (*with* Roberts, Leslie G.) K_2 of n lines in the plane. **80j:13008**
(Geller, Susan C.) *See* **Roberts, Leslie G., 80k:13005**
Kopeĭko, V. I. Stabilization of symplectic groups over a ring of polynomials. (Russian) **80f:13008**
Roberts, Leslie G. K_2 of some truncated polynomial rings. **80k:13005**
See also **Dayton, Barry H., 80j:13008**
Sherman, Clayton C. Some splitting results in the K-theory of rings. **80f:13009**

Secondary classifications:

Geller, Susan C. (*with* Roberts, Leslie G.) The relationship between the Picard groups and SK_1 of some algebraic curves. **(80a:14003)**
Roberts, Leslie G. *See* **Geller, Susan C., (80a:14003)**
Stafford, J. T. K-theory of Noetherian group rings. **(80k:16018)**
Strooker, Jan R. Karoubi-Villamayor K-theory is not homotopy Quillen theory. **(80b:18014)**
Weibel, Charles A. The homotopy exact sequence in algebraic K-theory. **(80f:18019)**

13D25 Complexes [See also 14Mxx.]

Bijan-Zadeh, Mohammad H. (*with* Sharp, Rodney Y.) On Grothendieck's local duality theorem. **80b:13017**
Buchsbaum, David A. Generic free resolutions. II. **80e:13007**
A new construction of the Eagon-Northcott complex. **80h:13015**
Hall, Janet E. Fundamental dualizing complexes for commutative Noetherian rings. **80b:13016**
(*with* Sharp, Rodney Y.) Duality for a commutative Noetherian ring which possesses a dualizing complex. **80j:13009**
Ivanov, A. F. On the dimension theory for complexes. (Russian) **80j:13010**
Paugam, Michel Sur les invariants homologiques des anneaux locaux noethériens: un calcul de la cinquième déflection e_5. **80d:13005**
Sharp, Rodney Y. *See* **Bijan-Zadeh, Mohammad H., 80b:13017** *and* **Hall, Janet E., 80j:13009**
Simis, Aron Koszul homology and its syzygy-theoretic part. **80c:13011**
Weyman, Jerzy Resolutions of the exterior and symmetric powers of a module. **80i:13005**

Secondary classifications:

Józefiak, Tadeusz Ideals generated by minors of a symmetric matrix. **(80g:14041)**
Lascoux, Alain Syzygies des variétés déterminantales. **(80j:14043)**

13D30 Torsion theory [See also 13C12, 16A63, 18E40.]

Colavita, Luis R. A generalization of the theorem of primary decomposition of groups to certain torsion theories in commutative rings. (Spanish) **80f:13010**
Henderson, J. (*with* Orzech, M.) Cotorsion modules for torsion theories. **80h:13018**
Koĭfman, L. A. Split-off torsions on commutative rings. (Russian) **80g:13008**
Orzech, M. *See* **Henderson, J., 80h:13018**

Secondary classifications:

Weber, Claude Torsion dans les modules d'Alexander. **(80b:57029)**

13D99 None of the above, but in this section

Costa, Roberto (*with* Micali, Artibano) Sur les algèbres de Rees. II. (English summary) **80a:13016**
Micali, Artibano *See* **Costa, Roberto, 80a:13016**
Šestakova, G. P. Homological determination of modules with torsion. (Russian) **80g:13009**
Uscki, Mirosław On exact modules over a commutative exact ring. **80f:13006**

Secondary classifications:

Faltings, Gerd Zur Existenz dualisierender Komplexe. **(80b:14010)**
Grigor'ev, D. Ju. The relation between the rank and the multiplicative complexity of a bilinear form over a Noetherian commutative ring. (Russian) **(80f:15010)**
Iversen, Birger Depth inequalities for complexes. **(80f:14003)**
Matlis, Eben The higher properties of R-sequences. **(80a:13013)**
Năstăsescu, Constantin (*with* van Oystaeyen, F.) ★Graded and filtered rings and modules. **(80k:16002)**
van Oystaeyen, F. *See* **Năstăsescu, Constantin, (80k:16002)**
Šestakova, G. P. The homological determination of torsion modules. (Russian) **(80b:12020)**
Valla, Giuseppe Remarks on generalized analytic independence. **(80b:13001)**
Vasconcelos, Wolmer V. (*with* Wiegand, Roger) Bounding the number of generators of a module. **(80h:13028)**
Wiegand, Roger *See* **Vasconcelos, Wolmer V., (80h:13028)**

13Exx Chain conditions, finiteness conditions

Secondary classifications:

Ratliff, Louis J., Jr. ★Chain conjectures in ring theory. **(80c:13008)**

13E05 Noetherian rings and modules

Arnold, J. T. (*with* Boisen, M. B., Jr.) Abnormalities in Noetherian rings. **80b:13007**
Boisen, M. B., Jr. *See* **Arnold, J. T., 80b:13007**
Brodmann, M. Asymptotic stability of $\mathrm{Ass}(M/I^nM)$. **80c:13012**
Papick, Ira J. A remark on coherent overrings. **80b:13008**

Secondary classifications:

Fuchs, Laszlo On a duality of modules over valuation rings. (Italian summary) **(80a:13020)**
Heitmann, Raymond C. Examples of noncatenary rings. **(80c:13002)**

13E10 Artinian rings and modules, finite-dimensional algebras

13E15 Rings and modules of finite generation or representation

Secondary classifications:

Huffman, W. C. (*with* Sloane, Neil J. A.) Most primitive groups have messy invariants. **(80c:20056)**
Okoh, Frank Direct sums and direct products of canonical pencils of matrices. **(80h:15004)**
Sloane, Neil J. A. *See* **Huffman, W. C., (80c:20056)**

13E99 None of the above, but in this section

Anderson, D. D. Some finiteness conditions on a commutative ring. **80c:13013**
Nicolas, Anne-Marie Sur les modules tels que toute suite croissante de sous-modules engendrés par n générateurs soit stationnaire. **80j:13011**
Prószyński, Andrzej Some functors related to polynomial theory. II. **80j:13012**

Secondary classifications:

Dobbs, David E. Coherence, ascent of going-down, and pseudo-valuation domains. **(80c:13003)**
Raillard, Nicole Sur les anneaux de Mori. (English summary) **(80a:13022)**

13Fxx Arithmetic rings [See also 12–XX.]

13F05 Dedekind and Prüfer rings and their generalizations

Brewer, J. W. (*with* Costa, D. L.) Seminormality and projective modules over polynomial rings. **80c:13008**
Brizolis, Demetrios A theorem on ideals in Prüfer rings of integral-valued polynomials. **80j:13013**
Costa, D. L. *See* **Brewer, J. W., 80c:13008**
Jain, Raj Kumar Structure of rings satisfying (Hm) and (Ham). **80c:13014**
Yeagy, R. W. Semiprime factorizations in unions of Dedekind domains. **80j:13014**

Secondary classifications:

Brandal, Willy ★Commutative rings whose finitely generated modules decompose. **(80g:13003)**
Hartzler, J. S. The arithmetic of regular ideals of $R[[X]]$. **(80h:13020)**
Kondo, Shoichi Zero-divisors of character rings of finite groups. **(80g:16012)**
Mehdi, Fazal *See* **Singh, Surjeet, (80f:13006)**
Papick, Ira J. Finite type extensions and coherence. **(80b:13003)**
Raillard, Nicole Sur les anneaux de Mori. **(80d:13007)**
Singh, Surjeet (*with* Mehdi, Fazal) Multiplication modules. **(80f:13006)**
Spulber, Dorian TP-rings. **(80a:13006)**

13F07 Euclidean rings and generalizations

Alperin, Roger (*with* Wright, David Lee) $K_2(2, k[T, T^{-1}])$ is generated by "symbols". **80h:13006**
Nagata, Masayoshi On Euclid algorithm. **80g:13010**
Wright, David Lee *See* **Alperin, Roger, 80h:13006**

13F10 Principal ideal rings

13F15 Factorial rings, unique factorization domains

Anderson, David F. Graded Krull domains. **80c:13015**
Bouvier, Alain Le groupe des classes de l'algèbre affine d'une forme quadratique. **80i:13007**
Halmay, Elena An example of a unique factorization domain whose completion is not a unique factorization domain. (Romanian. English summary) **80a:13017**
Mezzetti, Emilia (*with* Spangher, Walter) Some generalizations of a known theorem of M. Nagata. (Italian. English summary) **80a:13018**
(*with* Spangher, Walter) Polynomial rings over C_2FD and C_3FD domains. (Italian. English summary) **80a:13019**
Spangher, Walter *See* **Mezzetti, Emilia, 80a:13018** *and* **Mezzetti, Emilia, 80a:13019**

Secondary classifications:

Efroymson, Gustave A. Nash rings on planar domains. **(80b:14018)**
Ischebeck, Friedrich Über die Abbildung $\mathrm{Pic}A \to \mathrm{Pic}A_f$. **(80k:14015)**
Kollár, János Some subcategories of integral domains. **(80d:18005)**

13F20 Polynomial rings [See also 10M05.]

Almkvist, Gert The number of nonfree components in the decomposition of symmetric powers in characteristic p. **80b:13009**
El Ahmar, A. Sur la noethérianité de $A[X, \sigma, \delta]$ lorsque A est commutatif artinien. **80f:13011**
Johnson, Jon L. The graded ring $R[X_1, \cdots, X_n]$. **80f:13012**
Knus, M.-A. Modules quadratiques sur un anneau de polynômes. **80f:13013**
Kopeĭko, V. I. (*with* Suslin, A. A.) Quadratic modules over polynomial rings. (Russian) **80k:13007**
Suslin, A. A. *See* **Kopeĭko, V. I., 80k:13007**
Zaks, Abraham A-subalgebras of $A[x]$. **80h:13019**

Secondary classifications:

Bose, N. K. *See* **Prabhu, K. A., (80m:12019)**
Jordan, D. A. Primitive skew Laurent polynomial rings. **(80b:16002)**
(van der Kallen, Wilberd) *See* **Vorst, Ton, (80k:18016)**

Miyanishi, Masayoshi Polynomial rings and related topics. (Japanese) **(80m:14023)**
Mohan Kumar, N. On two conjectures about polynomial rings. **(80c:13010)**
Prabhu, K. A. (*with* Bose, N. K.) Number of irreducible q-ary polynomials in several variables with prescribed degrees. **(80m:12019)**
Querré, Julien Sur les anneaux complètement intégralement clos. **(80d:13002)**
Russell, Peter Simple Galois extensions of two-dimensional affine rational domains. **(80j:14049)**
Sathaye, Avinash On the Forster-Eisenbud-Evans conjectures. **(80c:13009)**
Seibt, Peter Differential filtrations and symbolic powers of regular primes. **(80g:13001)**
Vorst, Ton Localization of the K-theory of polynomial extensions. **(80k:18016)**

13F25 Formal power series rings

Hartzler, J. S. The arithmetic of regular ideals of $R[[X]]$. **80h:13020**
Kantschitsch, Hermann (*with* Müller, Winfried B.) Über die Kettenregel in $A[x_1, \ldots, x_n]$, $A(x_1, \ldots, x_n)$ und $A[[x_1, \ldots, x_n]]$. **80f:13014**
Commutative subsemigroups of the composition semigroup of formal power series over an integral domain. **80h:13021**
Lamèche-Gérardin, Khyra Quotient de Hadamard de séries rationnelles en variables non commutatives. **80k:13008**
Müller, Winfried B. *See* **Kantschitsch, Hermann, 80f:13014**
Reutenauer, Christophe Propriétés "à la Fatou" des séries rationnelles. **80b:13022**

Secondary classifications:

Berstel, Jean Séries rationnelles. **(80d:68084)**
Kantschitsch, Hermann Idealtheorie im nullsymmetrischen Fastring der formalen Potenzreihen. **(80i:16043)**

13F30 Discrete valuation rings

Fuchs, Laszlo On a duality of modules over valuation rings. (Italian summary) **80a:13020**

Secondary classifications:

Goldsmith, B. Endomorphism rings of torsion-free modules over a complete discrete valuation ring. **(80b:16026)**
Restuccia, Gaetana On the rank of the module of derivations of a ring with unequal characteristic. (Italian. English summary) **(80d:13009)**
Thomas, M. P. Invariant complements to closed invariant subspaces. **(80c:47009)**

13F99 None of the above, but in this section

Anderson, D. D. (*with* Matijevic, J.) Graded π-rings. **80h:13023**
Kiltinen, John O. An investigation of when ignorance is bliss: yes, Virginia, sometimes $(a+b)^m = a^m + b^m$. **80c:13016**
Kunz, Ernst The conormal module of an almost complete intersection. **80c:13017**
Lee, Sin Min On the constructions of local and arithmetic rings. **80d:13006**
Matijevic, J. *See* **Anderson, D. D., 80h:13023**

Secondary classifications:

Benz, Walter On Barbilian domains over commutative rings. **(80d:51010)**

13G05 Integral domains

Querré, Julien Intersections d'anneaux intègres. II. **80a:13021**
Raillard, Nicole Sur les anneaux de Mori. **80d:13007**
Sur les anneaux de Mori. (English summary) **80a:13022**
Ratliff, Louis J., Jr. Two theorems on the prime divisors of zeros in completions of local domains. **80k:13009**
Vaughan, N. H. (*with* Yeagy, R. W.) Factoring ideals into semiprime ideals. **80a:13023**
Yeagy, R. W. *See* **Vaughan, N. H., 80a:13023**

Secondary classifications:

Anderson, David F. Graded Krull domains. **(80c:13015)**
Dobbs, David E. Coherence, ascent of going-down, and pseudo-valuation domains. **(80a:13003)**
Fujita, Kazunori Minimal prime ideals of a finitely generated ideal. **(80i:13002)**
Kantschitsch, Hermann Commutative subsemigroups of the composition semigroup of formal power series over an integral domain. **(80h:13021)**
Mezzetti, Emilia (*with* Spangher, Walter) Polynomial rings over C_2FD and C_3FD domains. (Italian. English summary) **(80a:13019)**
Nicolas, Anne-Marie Sur les modules tels que toute suite croissante de sous-modules engendrés par n générateurs soit stationnaire. **(80j:13011)**
Papick, Ira J. Finite type extensions and coherence. **(80b:13003)**
Spangher, Walter *See* **Mezzetti, Emilia, (80a:13019)**

13Hxx Local rings and semilocal rings

13H05 Regular local rings

Secondary classifications:

Lequain, Yves Regular rings, differentially simple rings. (Portuguese) **(80j:13002)**
Differential simplicity in regular local rings. **(80c:12026)**
Nakajima, Haruhisa Invariants of reflection groups in positive characteristics. **(80i:14019)**
Platte, Erich Ein elementarer Beweis des Zariski-Lipman-Problems für graduierte analytische Algebren. **(80c:13005)**

13H10 Special types (Macaulay, Gorenstein, etc.)

Avramov, Luchezar L. *See* **Levin, Gerson L., 80j:13015**
Griffith, Phillip Maximal Cohen-Macaulay modules and representation theory. **80a:13024**
Herzog, Jürgen Ein Cohen-Macaulay-Kriterium mit Anwendungen auf den Konormalenmodul und den Differentialmodul. **80a:13025**
Józefiak, Tadeusz (*with* Weyman, Jerzy) Quotients of Cohen-Macaulay rings and perfect ideals. (Russian summary) **80a:13026**
Kind, Bernd (*with* Kleinschmidt, Peter) Schälbare Cohen-Macauley-Komplexe und ihre Parametrisierung. **80k:13010**
Kleinschmidt, Peter *See* **Kind, Bernd, 80k:13010**
Levin, Gerson L. (*with* Avramov, Luchezar L.) Factoring out the socle of a Gorenstein ring. **80j:13015**
Marinari, Maria Grazia The Gorenstein locus of a ring. (Italian. English summary) **80b:13024**
Ngo Viet Trung *See* **Schenzel, Peter; et al., 80l:13008**
Nguyễn Tự Cường *See* **Schenzel, Peter; et al., 80l:13008**
Schenzel, Peter (*with* Ngo Viet Trung; Nguyễn Tự Cường) Verallgemeinerte Cohen-Macaulay-Moduln. **80l:13008**
Multiplizitäten in verallgemeinerten Cohen-Macaulay-Moduln. **80m:13003**
Shepherd-Barron, N. I. Local homomorphisms and Hilbert-Samuel functions. **80j:13016**
Shimoda, Yasuhiro A note on Rees algebras of two-dimensional local domains. **80k:13011**
Valla, Giuseppe On form rings which are Cohen-Macaulay. **80b:13025**
Weyman, Jerzy *See* **Józefiak, Tadeusz, 80a:13026**

Secondary classifications:

Bresinsky, Henrik Monomial Gorenstein ideals. **(80g:14004)**
Cumino, Caterina On the seminormality of algebraic surfaces. (Italian) **(80i:14009)**
Faltings, Gerd Über Macaulayfizierung. **(80c:14030)**
Goto, Shiro On the Gorensteinness of determinantal loci. **(80h:14027)**
Herrmann, M. (*with* Schmidt, Rolf) Remarks on generalized Cohen-Macaulay rings and singularities. **(80b:14002)**
Kunz, Ernst Quasihomogeneous singularities of algebraic curves. **(80f:14015)**
Mezzetti, Emilia (*with* Spangher, Walter) Some generalizations of a known theorem of M. Nagata. (Italian. English summary) **(80a:13018)**
Ngo Viet Trung On the symbolic powers of determinantal ideals. **(80k:14053)**
Rego, C. J. A note on one-dimensional Gorenstein rings. **(80c:14009)**
Renschuch, Bodo Zur Abhängigkeit der Perfektheit von der Charakteristik. **(80a:14024)**
Sally, Judith D. Stretched Gorenstein rings. **(80k:14006)**
Schenzel, Peter Dualizing complexes and systems of parameters. **(80f:14025)**
Schmidt, Rolf *See* **Herrmann, M., (80b:14002)**
Shah, Jayant Stability of local rings of dimension 2. **(80k:14024)**
Shimoda, Yasuhiro The class group of the Rees algebras over polynomial rings. **(80h:13001)**
Spangher, Walter *See* **Mezzetti, Emilia, (80a:13018)**
Tennison, B. R. Intersection multiplicities and tangent cones. **(80d:14005)**
Valabrega, Paolo (*with* Valla, Giuseppe) Form rings and regular sequences. **(80d:14010)**
Valla, Giuseppe *See* **Valabrega, Paolo, (80d:14010)**
Waldi, Rolf Vollständige Durchschnitte in Cohen-Macaulay-Ringen. **(80d:14029)**

13H15 Multiplicity theory and related topics

Boda, Eduard Zur Berechnung von Schnittmultiplizitäten durch Längen. (Russian and English summaries) **80h:13026**
Kletzing, Dennis Local splittings and multiplicities of closed algebras. **80d:13008**
Kubota, Kazuji On superficial elements of open ideals of local rings. **80h:13027**
Nesselmann, Dieter Über superfizielle Systeme von Parametern. **80m:13004**
Über monoidale Transformationen lokaler Ringe. **80m:13005**
Rees, D. (*with* Sharp, Rodney Y.) On a theorem of B. Teissier on multiplicities of ideals in local rings. **80e:13009**
Sharp, Rodney Y. *See* **Rees, D., 80e:13009**
Vasconcelos, Wolmer V. (*with* Wiegand, Roger) Bounding the number of generators of a module. **80h:13028**
Wiegand, Roger *See* **Vasconcelos, Wolmer V., 80h:13028**

Secondary classifications:

Boda, Eduard (*with* Vogel, Wolfgang) On system of parameters, local intersection multiplicity and Bezout's theorem. **(80k:14011)**
Cumino, Caterina On singular subvarieties of algebraic varieties. (Italian. English summary) **(80d:14002)**
Shah, Jayant Stability of local rings of dimension 2. **(80k:14024)**
Singh, Balwant On two numerical criteria for normal flatness in codimension one. **(80j:14012)**
Stückrad, Jürgen (*with* Vogel, Wolfgang) Toward a theory of Buchsbaum singularities. **(80d:14004)**
Valla, Giuseppe On form rings which are Cohen-Macaulay. **(80h:13025)**
Vogel, Wolfgang *See* **Stückrad, Jürgen, (80d:14004)** *and* **Boda, Eduard, (80k:14011)**

13H99 None of the above, but in this section

Burch, A. Lindsay A theorem on integral closures of ideals in semi-local rings. **80b:13010**
Vasconcelos, Wolmer V. Regular sequences and powers of ideals. **80k:13012**

Secondary classifications:

Becker, Joseph (*with* Denef, J.; Lipshitz, L.; van den Dries, Lou) Ultraproducts and approximations in local rings. I. **(80k:14009)**
Brezuleanu, A. (*with* Radu, N.) Excellent rings and good separation of the module of differentials. **(80h:13029)**
Denef, J. *See* **Becker, Joseph; et al., (80k:14009)**
van den Dries, Lou *See* **Becker, Joseph; et al., (80k:14009)**
Golod, E. S. Homology of some local rings. (Russian) **(80a:13015)**
Lipshitz, L. *See* **Becker, Joseph; et al., (80k:14009)**
Orbanz, Ulrich Valuation semigroups and closed components. **(80f:13002)**
Pettit, M. E., Jr. *See* **Ratliff, Louis J., Jr., (80k:13004)**
Podewski, K.-P. (*with* Reineke, Joachim) Algebraically closed commutative local rings. **(80c:03039)**
Radu, N. *See* **Brezuleanu, A., (80h:13029)**
Ratliff, Louis J., Jr. (*with* Pettit, M. E., Jr.) Characterizations of H_1-local rings and of C_1-local rings. **(80k:13004)**
(*with* Robson, J. C.) Minimal bases for modules. **(80a:16042)**
$A(X)$ and GB-Noetherian rings. **(80k:13011)**
Reineke, Joachim *See* **Podewski, K.-P., (80c:03039)**
Restuccia, Gaetana On the rank of the module of derivations of a ring with unequal characteristic. (Italian. English summary) **(80d:13009)**
Robbiano, Lorenzo An algebraic property of $P^1 \times P^N$. **(80f:14027)**
Robson, J. C. *See* **Ratliff, Louis J., Jr., (80a:16042)**

13Jxx Topological rings [See also 16A80.]

13J05 Power series rings

Kantschitsch, Hermann Kompositionsideale in Potenzreihenringen über einem Körper. **80g:13011**
Über vertauschbare Potenzreihen. **80k:13013**
Lu, Chin Pi Purity of linearly topological rings in overrings. **80i:13009**
Robbin, Joel W. Evaluation fields for power series. I. The nullstellensatz. **80m:13006a**
Evaluation fields for power series. II. The reelnullstellensatz. **80m:13006b**

Secondary classifications:

Becker, Joseph On the nonflatness of analytic tensor product. **(80k:32008)**

13J10 Complete rings

Popescu, Dorin Algebraically pure morphisms. **80j:13017**
Wehrfritz, B. A. F. ★Lectures around complete local rings. **80k:13014**

Secondary classifications:

Kunz, Ernst Quasihomogeneous singularities of algebraic curves. **(80f:14015)**

13J15 Henselian rings

Paxia, Giuseppe The strict Henselization of a couple. (Italian. English summary) **80c:13018**

Secondary classifications:

Kneser, Martin Konstruktive Lösung p-adischer Gleichungssysteme. **(80h:10027)**

13J20 Global topological rings

13J25 Ordered rings [See also 06F25, 16A86.]

Secondary classifications:

Robbin, Joel W. Evaluation fields for power series. I. The nullstellensatz. **(80m:13006a)**
Evaluation fields for power series. II. The reelnullstellensatz. **(80m:13006b)**

13J99 None of the above, but in this section

Lucas, Dean A multiplication in N-space. **80h:13011**
Marot, Jean Topologies d'anneau principal. (English summary) **80f:13015**
Segal, Daniel Congruence topologies in commutative rings. **80j:13018**
Więsław, Witold Locally bounded topologies on Euclidean rings. **80a:13027**

13K05 Witt vectors and related rings

Kleinstein, Jerrold L. (*with* Rosenberg, Alex) Signatures and semisignatures of abstract Witt rings and Witt rings of semilocal rings. **80a:13028**
Morin-Strom, Karl A. A Witt theorem for non-defective lattices. **80a:13029**
Rosenberg, Alex *See* **Kleinstein, Jerrold L., 80a:13028**

13L05 Applications of logic to commutative algebra [See also 03Cxx, 03Hxx.]

Secondary classifications:

Cherlin, Gregory (*with* Dickmann, Maximo Alejandro) Anneaux réels clos et anneaux des fonctions continues. (English summary) **(80m:03069)**
Dickmann, Maximo Alejandro *See* **Cherlin, Gregory, (80m:03069)**
Rose, Bruce I. Rings which admit elimination of quantifiers. **(80e:03036a)**
Corrigendum: "Rings which admit elimination of quantifiers" (J. Symbolic Logic **43** (1978), no. 1, 92–112). **(80e:03036b)**

13Mxx Finite commutative rings {For number-theoretic aspects, see 12Cxx.}

13M05 Structure

13M10 Polynomials

13M99 None of the above, but in this section

Secondary classifications:

Clausen, H. L. The multiplications in $GF(q)[x]/(a(x))$ considered as linear transformations. **(80c:12025)**

13N05 Differential algebra [See also 12H05.]

Brezuleanu, A. (*with* Radu, N.) Excellent rings and good separation of the module of differentials. **80h:13029**
Keigher, William F. Quasi-prime ideals in differential rings. **80c:13019**
Nowicki, Andrzej Radical irregularity of some polynomial rings. **80h:13007**
Radu, N. *See* **Brezuleanu, A., 80h:13029**
Restuccia, Gaetana On the rank of the module of derivations of a ring with unequal characteristic. (Italian. English summary) **80d:13009**

Secondary classifications:

Keigher, William F. Symmetric monoidal comonads and differential algebra. **(80c:18007)**

14–XX ALGEBRAIC GEOMETRY

14–01 Elementary exposition, textbooks

Griffiths, Phillip A. (*with* Harris, Joseph) ★Principles of algebraic geometry. **80b:14001**
Harris, Joseph *See* **Griffiths, Phillip A., 80b:14001**
(Manin, Ju. I.) *See* **Mumford, David, 80i:14001**
Mumford, David ★Алгебраическая геометрия. I. Комплексные проективные многообразия. (Russian) [Algebraic geometry. I. Complex projective varieties] **80i:14001**
Stichtenoth, Henning ★Algebraische Funktionenkörper einer Variablen. **80i:14002**
Walker, Robert J. ★Algebraic curves. **80c:14001**

Secondary classifications:

Rollero, Aldo Elementary considerations on plane algebraic curves. (Italian. English and French summaries) **(80e:14027)**

14–02 Advanced exposition (research surveys, monographs, etc.)

Griffiths, Phillip A. Complex analysis and algebraic geometry. **80i:14003**

Secondary classifications:

Van de Ven, Antonius On the Enriques classification of algebraic surfaces. **(80j:14025)**

14–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Bottazzini, Umberto Multiply-periodic functions in the correspondence between Hermite and Casorati. (Italian) **(80b:01009)**
(Casorati, Felice) *See* **Bottazzini, Umberto, (80b:01009)** *and* **Neuenschwander, E., (80c:01006)**
(Deligne, Pierre) *See* **Mumford, David; et al., (80a:01038)**
Gerretsen, J. C. H. Der Kalkül der abzählenden Geometrie. **(80k:01043)**
(Hermite, Ch.) *See* **Bottazzini, Umberto, (80b:01009)**
Konjuh, V. C. *See* **Zaleskiĭ, A. E., (80i:01014)**
Mumford, David (*with* Tate, John) Fields medals. IV. An instinct for the key idea. **(80a:01038)**
Neuenschwander, E. Der Nachlass von Casorati (1835–1890) in Pavia. **(80c:01006)**
Tate, John *See* **Mumford, David, (80a:01038)**
Weil, André ★Oeuvres scientifiques. Collected papers. Vol. I (1926–1951). **(80k:01067a)**
Zaleskiĭ, A. E. (*with* Konjuh, V. C.) ★Алгебра и алгебраическая геометрия в работах математиков Белоруссии. (Russian) [Algebra and algebraic geometry in the works of the mathematicians of Belorussia] **(80i:01014)**
Bibliography:
Weil, André *See* **Weil, André, (80k:01067a)**
Biography:
Deligne, Pierre *See* **Mumford, David; et al., (80a:01038)**

14–04 Explicit machine computation and programs (not the theory of computation or programming)

14–06 Proceedings, conferences, etc.

(Lønsted, Knud) *See* **Algebraic geometry, 80k:14001**
(Olson, Loren D.) *See* **Algebraic geometry, 80c:14002**
Algebraic geometry ★Algebraic geometry. **80c:14002**
★Algebraic geometry. **80k:14001**
See also **Journées: Géometrie Algébrique de Rennes, 80m:14001a; Journées: Géométrie Algébrique de Rennes, 80m:14001b** *and* **Journées: Géométrie Algébrique de Rennes, 80m:14001c**
Copenhagen *See* **Algebraic geometry, 80k:14001**
Journées:
Géometrie Algébrique de Rennes ★Journées de Géométrie Algébrique de Rennes. Vol. I. (French) **80m:14001a**
★Journées de Géométrie Algébrique de Rennes. Vol. II. (French) **80m:14001b**
★Journées de Géométrie Algébrique de Rennes. Vol. III. (French) **80m:14001c**
Meeting:
Algebraic Geometry *See* **Algebraic geometry, 80k:14001**
Rennes *See* **Journées: Géometrie Algébrique de Rennes, 80m:14001a; Journées: Géométrie Algébrique de Rennes, 80m:14001b** *and* **Journées: Géométrie Algébrique de Rennes, 80m:14001c**
Symposium:
Algebraic Geometry *See* **Algebraic geometry, 80c:14002**
Tromsø *See* **Algebraic geometry, 80c:14002**

Secondary classifications:

(Gamkrelidze, R. V.) *See* **Current problems in mathematics, (80d:00008)** *and* **Algebra, Topology, Geometry, (80h:00001)**
(Hervier, Y.) *See* **Variétés analytiques compactes, (80a:32002)**
(Hirschowitz, André) *See* **Variétés analytiques compactes, (80a:32002)**
(Ramanathan, K. G.) *See* **C. P. Ramanujam—a tribute, (80d:00018)**
(Ramanujam, Chidambaran Padmanabhan) *See* **C. P. Ramanujam—a tribute, (80d:00018)**
Algebra, Topology, Geometry ★Алгебра. Топология. Геометрия. Том 16. (Russian) [Algebra. Topology. Geometry. Vol. 16] **(80h:00001)**
Analytic varieties *See* **Variétés analytiques compactes, (80a:32002)**
Colloque:
Variétés Analytiques Compactes *See* **Variétés analytiques compactes, (80a:32002)**
Compact analytic varieties *See* **Variétés analytiques compactes, (80a:32002)**
Current problems in mathematics ★Современные проблемы математики. Том 12. (Russian) [Current problems in mathematics. Vol. 12] **(80d:00008)**
Geometry *See* **Algebra, Topology, Geometry, (80h:00001)**
Geometry and global analysis ★Geometry and global analysis. (Japanese) **(80g:58002)**
Global analysis *See* **Geometry and global analysis, (80g:58002)**
Itogi Nauki i Tekniki *See* **Current problems in mathematics, (80d:00008)** *and* **Algebra, Topology, Geometry, (80h:00001)**
Kyoto *See* **Geometry and global analysis, (80g:58002)**
Nice *See* **Variétés analytiques compactes, (80a:32002)**
C. P. Ramanujam—a tribute ★C. P. Ramanujam—a tribute. **(80d:00018)**
Symposium:
Geometry and Global Analysis *See* **Geometry and global analysis, (80g:58002)**
Topology *See* **Algebra, Topology, Geometry, (80h:00001)**
Variétés analytiques compactes ★Variétés analytiques compactes. **(80a:32002)**

14Axx Foundations

14A05 Relevant commutative algebra [See also 13–XX.]

14A10 Varieties

14A15 Schemes

Valabrega, Paolo P-morphisms and prolongation of sheaves. (Italian. English summary) **80k:14002**
Verra, Alessandro Some properties of schemes whose generic point is open. (Italian. English summary) **80f:14001**

14A20 Generalizations (algebraic spaces, motifs)

Danilov, V. I. The geometry of toric varieties. (Russian) **80g:14001**

14A25 Elementary questions

Cartier, Pierre (*with* Tate, John) A simple proof of the main theorem of elimination theory in algebraic geometry. **80d:14001**
Coste, Michel *See* **Coste-Roy, Marie-Françoise, 80m:14002**
Coste-Roy, Marie-Françoise (*with* Coste, Michel) Topologies for real algebraic geometry. **80m:14002**
Costovici, Gh. General topological frame for Zariski's topologies. (Romanian summary) **80k:14003**
Eisenbud, David (*with* Hochster, Melvin) A Nullstellensatz with nilpotents and Zariski's main lemma on holomorphic functions. **80g:14002**
Hochster, Melvin *See* **Eisenbud, David, 80g:14002**
Marinari, Maria Grazia (*with* Raimondo, Mario) Properties of the regular functions ring of affine varieties defined over any field. **80k:14004**
Raimondo, Mario *See* **Marinari, Maria Grazia, 80k:14004**
Tate, John *See* **Cartier, Pierre, 80d:14001**

Secondary classifications:

Irving, Ronald S. Generic flatness and the Nullstellensatz for Ore extensions. **(80b:13005)**
Kalman, R. E. On partial realizations, transfer functions, and canonical forms. **(80k:93022)**

Mezzetti, Emilia (*with* Spangher, Walter) Some criteria for extending arithmetic properties under the operation of projective closure. (Italian. English summary) **(80h:13002)**
Robbin, Joel W. Evaluation fields for power series. I. The nullstellensatz. **(80m:13006a)** Evaluation fields for power series. II. The reelnullstellensatz. **(80m:13006b)**
Spangher, Walter *See* **Mezzetti, Emilia, (80h:13002)**

14A99 None of the above, but in this section

Secondary classifications:

Coste, Michel *See* **Coste-Roy, Marie-Françoise, (80m:03112)**
Coste-Roy, Marie-Françoise (*with* Coste, Michel) The generic model of an ε-stable geometric extension of the theory of rings is of line type. **(80m:03112)**
Reyes, G. E. (*with* Wraith, G. C.) A note on tangent bundles in a category with a ring object. **(80f:18011)**
Röhrl, Helmut On the zeros of polynomials over arbitrary finite-dimensional algebras. **(80g:16022)**
Wraith, G. C. *See* **Reyes, G. E., (80f:18011)**

14Bxx Local theory [See also 32Bxx.]

14B05 Singularities [See also 14E15, 32B30, 32C40, 58C27.]

Bărcănescu, Şerban (*with* Manolache, Nicolae) Nombres de Betti d'une singularité de Segre-Veronese. (English summary) **80g:14003**
Behnke, Kurt (*with* Riemenschneider, Oswald) Diedersingularitäten. **80a:14001**
Bresinsky, Henrik Monomial Gorenstein ideals. **80g:14004**
Brieskorn, E. Die Hierarchie der 1-modularen Singularitäten. (English summary) **80k:14005**
Casas Alvero, Eduardo One-dimensional singularities of an algebraic surface. (Spanish) **80g:14005**
Casnino, Caterina On singular subvarieties of algebraic varieties. (Italian. English summary) **80d:14002**
Danilov, V. I. Newton polyhedra and vanishing cohomology. (Russian) **80h:14001**
Dixon, David Joseph The fundamental divisor of normal double points of surfaces. **80j:14001**
Durfee, Alan H. Fifteen characterizations of rational double points and simple critical points. **80m:14003**
Fukuwa, Masami On the structures of integral semigroups. **80c:14003**
Greuel, Gert-Martin (*with* Hamm, Helmut A.) Invarianten quasihomogener vollständiger Durchschnitte. **80d:14003**
Hamm, Helmut A. *See* **Greuel, Gert-Martin, 80d:14003**
Herrmann, M. (*with* Schmidt, Rolf) Remarks on generalized Cohen-Macaulay rings and singularities. **80b:14002**
Higuchi, Teiichi (*with* Tomaru, Tadashi) On the degree of determinacy of homogeneous polynomials in complex variables. **80a:14002**
Langevin, Rémi Courbure et singularités complexes. **80g:14006**
Manolache, Nicolae *See* **Bărcănescu, Şerban, 80g:14003**
Randell, Richard On the topology of nonisolated singularities. **80f:14002**
Riemenschneider, Oswald *See* **Behnke, Kurt, 80a:14001**
Sally, Judith D. Stretched Gorenstein rings. **80k:14006**
Schmidt, Rolf *See* **Herrmann, M., 80b:14002**
Stückrad, Jürgen (*with* Vogel, Wolfgang) Toward a theory of Buchsbaum singularities. **80d:14004**
Tomaru, Tadashi *See* **Higuchi, Teiichi, 80a:14002**
Villamayor, Orlando E. On Jacobian extensions of ideals. **80k:14007**
Vogel, Wolfgang *See* **Stückrad, Jürgen, 80d:14004**

Secondary classifications:

Abhyankar, Shreeram S. Quasirational singularities. **(80h:14014)**
Arnol'd, V. I. Critical points of functions on a manifold with boundary, the simple Lie groups B_k, C_k, F_4 and singularities of evolutes. (Russian) **(80j:58008)**
Bussemaker, F. C. (*with* Cvetković, Dragoš M.; Seidel, J. J.) Graphs related to exceptional root systems. **(80g:05049)**
Ciliberto, Ciro On the Euler-Poincaré characteristic of complete intersections in CP', with an isolated singularity. (Italian. English summary) **(80f:57011)**
Cvetković, Dragoš M. *See* **Bussemaker, F. C.; et al., (80g:05049)**
de Fraysseix, Hubert Sur la représentation d'une suite à triples et à doubles occurrences par la suite des points d'intersection d'une courbe fermée du plan. (English summary) **(80j:05059)**
Higuchi, Teiichi (*with* Watanabe, Kimio; Ohyanagi, Shigeki) On purely elliptic singularities. **(80g:32017)**
Kirby, Robion C. (*with* Scharlemann, Martin) Eight faces of the Poincaré homology 3-sphere. **(80k:57042)**
Lê Dũng Tráng The geometry of the monodromy theorem. **(80i:32031)** Le théorème de la monodromie singulier. (English summary) **(80i:32032)**
Ohyanagi, Shigeki *See* **Higuchi, Teiichi; et al., (80g:32017)**
Oka, Mutsuo On the bifurcation of the multiplicity and topology of the Newton boundary. **(80h:32018)**
Oneto, Anna Conductor and true adjoints to a curve on a surface. (Italian. English summary) **(80k:14039)**
Orlik, Peter Singularities and group actions. **(80e:57052)**
Rees, D. (*with* Sharp, Rodney Y.) On a theorem of B. Teissier on multiplicities of ideals in local rings. **(80e:13009)**
Sally, Judith D. Cohen-Macaulay local rings of maximal embedding dimension. **(80e:14022)**
Savel'ev, L. V. Structure of the singularities of a class of complex hypersurfaces. (Russian) **(80g:32018)**
Scharlemann, Martin *See* **Kirby, Robion C., (80k:57042)**
Seidel, J. J. *See* **Bussemaker, F. C.; et al., (80g:05049)**
Sharp, Rodney Y. *See* **Rees, D., (80e:13009)**
Simis, Aron Koszul homology and its syzygy-theoretic part. **(80c:13011)**
Suzuki, Masahiko *See* **Yoshinaga, Etsuo, (80f:32009)**
Varčenko, A. N. A formula for the rank of the homology groups of the boundary of an isolated singularity of a surface in $\mathbf{C}^3$ and the Newton diagram. (Russian) **(80e:32006)**
Watanabe, Kimio *See* **Higuchi, Teiichi; et al., (80g:32017)**
Yoshinaga, Etsuo (*with* Suzuki, Masahiko) On the topological types of singularities of Brieskorn-Pham type. **(80f:32009)**

14B07 Deformations of singularities [See also 14D15, 32C40, 32G05, 32G11, 32G13.]

Elkik, Renée Singularités rationnelles et déformations. **80c:14004**
Lipman, Joseph Double point resolutions of deformations of rational singularities. **80g:14007**
Looijenga, Eduard The discriminant of a real simple singularity. **80c:14005**
Teissier, Bernard On a Minkowski-type inequality for multiplicities. II. **80j:14002**
Wahl, Jonathan M. Simultaneous resolution and discriminantal loci. **80g:14008**
Waldi, Rolf Deformation von Gorenstein-Singularitäten der Kodimension 3. **80k:14008**

Secondary classifications:

Arnol'd, V. I. Critical points of functions on a manifold with boundary, the simple Lie groups B_k, C_k, F_4 and singularities of evolutes. (Russian) **(80j:58008)**
Behnke, Kurt (*with* Riemenschneider, Oswald) Diedersingularitäten. **(80a:14001)**
Buchweitz, Ragnar-Olaf (*with* Greuel, Gert-Martin) Le nombre de Milnor, équisingularité et déformations de singularités des courbes réduites. (English summary) **(80b:32010)**
Fedotov, V. P. A new method for the proof of the inequalities between mixed volumes and the generalization of Aleksandrov-Fenchel-Shephard inequalities. (Russian) **(80f:52012)**
Greuel, Gert-Martin *See* **Buchweitz, Ragnar-Olaf, (80b:32010)**
Griffiths, Phillip A. Complex differential and integral geometry and curvature integrals associated to singularities of complex analytic varieties. **(80k:53101)**
Hovanskiĭ, A. G. Newton polyhedra, and the genus of complete intersections. (Russian) **(80b:14022)** The index of a polynomial vector field. (Russian) **(80f:58033)**
Lê Dũng Tráng (*with* Teissier, Bernard) Sur la géométrie des surfaces complexes. I. Tangentes exceptionnelles. **(80f:32008)**
Platte, Erich Ein elementarer Beweis des Zariski-Lipman-Problems für graduierte analytische Algebren. **(80c:13005)**
Rees, Elmer (*with* Thomas, Emery) Smoothings of isolated singularities. **(80e:57021)**
Riemenschneider, Oswald *See* **Behnke, Kurt, (80a:14001)**
Teissier, Bernard *See* **Lê Dũng Tráng, (80f:32008)**
Thomas, Emery *See* **Rees, Elmer, (80e:57021)**

14B10 Infinitesimal methods

14B12 Local deformation theory, Artin approximation, etc.

Becker, Joseph (*with* Denef, J.; Lipshitz, L.; van den Dries, Lou) Ultraproducts and approximations in local rings. I. **80k:14009**
Denef, J. *See* **Becker, Joseph; et al., 80k:14009**
van den Dries, Lou *See* **Becker, Joseph; et al., 80k:14009**
Lascar, Daniel Caractère effectif des théorèmes d'approximation d'Artin. (English summary) **80c:14006**
Lipshitz, L. *See* **Becker, Joseph; et al., 80k:14009**

Secondary classifications:

Popescu, Dorin Algebraically pure morphisms. **(80j:13017)**

14B15 Local cohomology [See also 32C36.]

Iversen, Birger Depth inequalities for complexes. **80f:14003**
Stoia, Manuela The singular set of a sheaf. (Romanian. English summary) **80k:14010**

Secondary classifications:

Bijan-Zadeh, Mohammad H. Torsion theories and local cohomology over commutative and Noetherian rings. **(80h:13013)**
Hall, Janet E. (*with* Sharp, Rodney Y.) Duality for a commutative Noetherian ring which possesses a dualizing complex. **(80j:13009)**
Ivanov, A. F. On the dimension theory for complexes. (Russian) **(80j:13010)**
Kempf, George R. The Hochster-Roberts theorem of invariant theory. **(80g:14040)**
Sharp, Rodney Y. *See* **Hall, Janet E., (80j:13009)**

14B20 Formal neighborhoods

Speiser, Robert Formal meromorphic functions and cohomology on an algebraic variety. **80m:14004**

Secondary classifications:

Bingener, Jürgen (*with* Flenner, Hubert) Einige Beispiele nichtalgebraischer Singularitäten. **(80j:32013)**
Flenner, Hubert *See* **Bingener, Jürgen, (80j:32013)**
Manolache, Nicolae Meromorphic functions along a Segre-Veronese subvariety. **(80g:14020)**
Marot, Jean Limite inductive plate de P-anneaux. **(80k:13008)**

14B25 Local structure of maps: étale, flat, etc. [See also 13–XX, 14E40.]

Secondary classifications:

Faltings, Gerd Zur Existenz dualisierender Komplexe. **(80b:14010)**

14B99 None of the above, but in this section

Boda, Eduard (*with* Vogel, Wolfgang) On system of parameters, local intersection multiplicity and Bezout's theorem. **80k:14011**
Cox, David A. Algebraic tubular neighborhoods. I, II. **80b:14003**
Hopkins, Glenn W. (*with* Lipman, Joseph) An elementary theory of Grothendieck's residue symbol. **80j:14003**
Lipman, Joseph *See* **Hopkins, Glenn W., 80j:14003**
Vogel, Wolfgang *See* **Boda, Eduard, 80k:14011**

Secondary classifications:

Kubota, Kazuji On superficial elements of open ideals of local rings. **(80h:13027)**
Parigi, Giuliano La simplification par les variétés de Demazure. (English summary) **(80e:32023)**
Selbt, Peter Differential filtrations and symbolic powers of regular primes. **(80g:13001)**

14Cxx Cycles and subschemes

14C05 Parametrization (Chow and Hilbert schemes)

Barth, Wolf (*with* Van de Ven, Antonius) Fano varieties of lines on hypersurfaces. **80j:14004**
Collino, Alberto Lines on quartic threefolds. **80j:14005**
Huibregtse, Mark E. The Albanese mapping for a punctual Hilbert scheme. I. Irreducibility of the fibers. **80g:14009**
Van de Ven, Antonius *See* **Barth, Wolf, 80j:14004**

Secondary classifications:

Bloch, S. (*with* Murre, J. P.) On the Chow group of certain types of Fano threefolds. **(80m:14025)**
Murre, J. P. *See* **Bloch, S., (80m:14025)**
Tannenbaum, Allen Irreducible components of the Chow scheme of space curves. **(80c:14018)**

14C10 Equivalence relations

Laksov, Dan Secant bundles and Todd's formula for the double points of maps into $\mathbf{P}^n$. **80c:14007**
Vainsencher, Israel The degrees of certain strata of the dual variety. (Portuguese) **80g:14010**

Secondary classifications:

Accola, Robert D. M. On Castelnuovo's inequality for algebraic curves. I. **(80l:14008)**
Colliot-Thélène, Jean-Louis Formes quadratiques multiplicatives et variétés algébriques. **(80g:14014)**

14C15 Rational equivalence rings

Bloch, S. Torsion algebraic cycles and a theorem of Roitman. **80k:14012**

Secondary classifications:

Fulton, William (*with* MacPherson, Robert) Defining algebraic intersections. **(80g:14011)**
MacPherson, Robert *See* **Fulton, William, (80g:14011)**

14C17 Intersection theory

Beltrametti, Mauro On the contact of hypersurfaces along reducible subvarieties. (Italian. English summary) **80j:14006**
Fulton, William (*with* MacPherson, Robert) Defining algebraic intersections. **80g:14011**
MacPherson, Robert *See* **Fulton, William, 80g:14011**
Palleschi, Marino The hypersurfaces that are complete intersections on an algebraic variety. (Italian. English summary) **80k:14013**
Schlemann, Günther Zum geometrischen Sinn einer negativen Selbstschnittzahl. **80h:14002**
Teissier, Bernard Du théorème de l'index de Hodge aux inégalités isopérimétriques. (English summary) **80k:14014**
Tennison, B. R. Intersection multiplicities and tangent cones. **80d:14005**

Secondary classifications:

Papantonopoulou, Algi Non-proper intersection of surfaces and applications. **(80c:14033)**
Piene, Ragni Polar classes of singular varieties. **(80j:14051)**
Shepherd-Barron, N. I. Local homomorphisms and Hilbert-Samuel functions. **(80j:13016)**

14C20 Divisors, linear systems

Bădescu, Lucian A remark on the Grothendieck-Lefschetz theorem about the Picard group. **80g:14012**
Ischebeck, Friedrich Zum Verhalten der Picardgruppe eines Tensorproduktes bei Erweiterung eines Faktors. **80j:14007**

Secondary classifications:

Blass, Piotr (*with* Lipman, Joseph) Remarks on adjoints and arithmetic genera of algebraic varieties. **(80j:14017)**
Dixon, David Joseph The fundamental divisor of normal double points of surfaces. **(80j:14001)**
Fujita, Takao An extendability criterion for vector bundles on ample divisors. **(80f:14006)**
Griffiths, Phillip A. (*with* Harris, Joseph) Residues and zero-cycles on algebraic varieties. **(80d:14006)**
A theorem concerning the differential equations satisfied by normal functions associated to algebraic cycles. **(80k:14016)**
Harris, Joseph *See* **Griffiths, Phillip A., (80d:14006)**
Iitaka, Shigeru An index formula for linear systems and transformations of Weierstrass points. (Japanese) **(80c:14013)**
Jensen, Sven Toft Picard schemes of quotients by finite commutative group schemes. **(80a:14015)**
Lipman, Joseph *See* **Blass, Piotr, (80j:14017)**

14C21 Webs, nets [See also 53A60.]

Secondary classifications:

Chern, Shiing Shen (*with* Griffiths, Phillip A.) An inequality for the rank of a web and webs of maximum rank. **(80b:53009)**
(*with* Griffiths, Phillip A.) Abel's theorem and webs. **(80b:53008)**
Griffiths, Phillip A. *See* **Chern, Shiing Shen, (80b:53008)** *and* **Chern, Shiing Shen, (80b:53009)**

14C22 Picard groups

Ischebeck, Friedrich Über die Abbildung $\mathrm{Pic}A \to \mathrm{Pic}A_f$. **80k:14015**

Secondary classifications:

Bouvier, Alain Le groupe des classes de l'algèbre affine d'une forme quadratique. **(80l:13007)**
Geller, Susan C. (*with* Roberts, Leslie G.) The relationship between the Picard groups and SK_1 of some algebraic curves. **(80a:14003)**
Heinrich, E. Die Picardgruppen affinoider Algebren und ihrer affinen Reduktionen. **(80c:32030)**
Roberts, Leslie G. *See* **Geller, Susan C., (80a:14003)**

14C25 Zero-cycles

Briançon, J. (*with* Iarrobino, A.) Dimension of the punctual Hilbert scheme. **80g:14013**
Colliot-Thélène, Jean-Louis Formes quadratiques multiplicatives et variétés algébriques. **80g:14014**
Griffiths, Phillip A. (*with* Harris, Joseph) Residues and zero-cycles on algebraic varieties. **80d:14006**
Harris, Joseph *See* **Griffiths, Phillip A., 80d:14006**
Iarrobino, A. *See* **Briançon, J., 80g:14013**

14C30 Transcendental methods, Hodge theory [See also 32J25.]

Cattani, Eduardo H. (*with* Kaplan, Aroldo G.) The monodromy weight filtration for a several variables degeneration of Hodge structures of weight two. **80h:14003**
Gordon, Gerald Leonard On the primitive cohomology of submanifolds. **80e:14001**
Griffiths, Phillip A. A theorem concerning the differential equations satisfied by normal functions associated to algebraic cycles. **80k:14016**
Kaplan, Aroldo G. *See* **Cattani, Eduardo H., 80h:14003**
Peters, Chris On the local Torelli theorem, a review of known results. **80d:14007**
Sommese, Andrew John On the rationality of the period mapping. **80d:14008**
Wilson, J. C. Differentials of the 2nd kind on a product surface. **80m:14005**

Secondary classifications:

Cattani, Eduardo H. (*with* Kaplan, Aroldo G.) Horizontal SL_2-orbits in flag domains. **(80b:32028)**
Conte, A. (*with* Murre, J. P.) The Hodge conjecture for fourfolds admitting a covering by rational curves. **(80a:14018)**
Danilov, V. I. Newton polyhedra and vanishing cohomology. (Russian) **(80b:14001)**
Griffiths, Phillip A. (*with* Harris, Joseph) Residues and zero-cycles on algebraic varieties. **(80d:14006)**
Complex analysis and algebraic geometry. **(80l:14003)**
Harris, Joseph *See* **Griffiths, Phillip A., (80d:14006)**
Kaplan, Aroldo G. *See* **Cattani, Eduardo H., (80b:32028)**
Morgan, John W. Hodge theory for the algebraic topology of smooth algebraic varieties. **(80g:32013)**
Murre, J. P. *See* **Conte, A., (80a:14018)**
Otsuki, Makoto A residue formula for Chern classes associated with logarithmic connections. **(80f:32006)**
Tankeev, S. G. Algebraic cycles on abelian varieties. (Russian) **(80b:14020)**

14C35 Applications of methods of algebraic K-theory [See also 14F05, 18F25.]

Geller, Susan C. (*with* Roberts, Leslie G.) The relationship between the Picard groups and SK_1 of some algebraic curves. **80a:14003**

Roberts, Leslie G. *See* **Geller, Susan C., 80a:14003**
Sherman, Clayton C. *K*-cohomology of regular schemes. **80b:14004**
Gersten's conjecture for arithmetic surfaces. **80d:14009**

Secondary classifications:

Collino, Alberto Grothendieck's *K*-theory and the cubic threefold with one ordinary double point. (Italian summary) **(80l:14012)**
Dayton, Barry H. *K*-theory of tetrahedra. **(80e:18007)**
(*with* Roberts, Leslie G.) K_2 of n lines in the plane. **(80j:13008)**
(Geller, Susan C.) *See* **Roberts, Leslie G., (80k:13005)**
Roberts, Leslie G. K_2 of some truncated polynomial rings. **(80k:13005)**
See also **Dayton, Barry H., (80j:13008)**
Šehtman, V. V. Algebraic *K*-theory and characteristic classes. (Russian) **(80k:14030)**
Correction: "Algebraic *K*-theory and characteristic classes" [Uspehi Mat. Nauk 33 (1978), no. 6(204), 239–240]. (Russian) **(80k:14031)**
Snider, Robert L. Is the Brauer group generated by cyclic algebras? **(80k:16010)**

14C40 Riemann-Roch theorems [See also 14F12.]

Secondary classifications:

Piene, Ragni A proof of Noether's formula for the arithmetic genus of an algebraic surface. **(80j:14024)**

14C99 None of the above, but in this section

Iitaka, Shigeru Geometry on complements of lines in P^2. **80g:14015**

Secondary classifications:

Alnkvist, Gert The number of nonfree components in the decomposition of symmetric powers in characteristic p. **(80b:13009)**
El Zein, Fouad Complexe dualisant et applications à la classe fondamentale d'un cycle. (English summary) **(80h:14009)**
Holme, Audun Deformation and stratification of secant structure. **(80e:14026)**
Jouanolou, J. P. Feuilles compactes des feuilletages algébriques. **(80g:14022)**
Palleschi, Marino Remarks on the regularity of the adjoint to an ample system of hypersurfaces on an algebraic variety. (Italian. English summary) **(80k:14034)**

14Dxx Families, fibrations

14D05 Structure of families (Picard-Lefschetz, Picard-Fuchs theory, etc.)

A'Campo, Norbert Tresses, monodromie et le groupe symplectique. **80m:14006**
Aomoto, Kazuhiko Fonctions hyperlogarithmiques et groupes de monodromie unipotents. **80g:14016**
Fujita, Takao The sheaf of relative canonical forms of a Kähler fiber space over a curve. **80b:14004**
Kantor, Jean-Michel Solutions formelles d'équations différentielles algébriques. (English summary) **80k:14017**
Klarès, Bernard Sur une classe de connexions relatives. (English summary) **80b:14005**
Lanteri, Antonio (*with* Struppa, Daniele) Degenerations of compact surfaces and Lefschetz fibrations into curves of genus $g > 1$. (Italian. English summary) **80k:14018a**
(*with* Struppa, Daniele) Degenerations of compact surfaces along conjugated pairs. (Italian. English summary) **80k:14018b**
Malgrange, B. Remarques sur les équations différentielles à points singuliers irréguliers. **80k:14019**
Scherk, J. On the Gauss-Manin connection of an isolated hypersurface singularity. **80g:14017**
Struppa, Daniele *See* **Lanteri, Antonio, 80k:14018a** *and* **Lanteri, Antonio, 80k:14018b**

Secondary classifications:

Dubèche, A. Formes canoniques rationnelles d'un système différentiel à point singulier irrégulier. **(80m:34003)**
(Gérard, Raymond) *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Griffiths, Phillip A. A theorem concerning the differential equations satisfied by normal functions associated to algebraic cycles. **(80k:14016)**
Klarès, Bernard Sur la monodromie des systèmes de Pfaff du type de Fuchs sur $P_m(C)$. **(80k:32026)**
Levelt, A. H. M. A descent theorem for differential operators of the first kind. **(80b:12021)**
Lutz, Donald A. Birkhoff invariants and meromorphic differential equations. **(80l:34007)**
Malgrange, B. Remarques sur les équations différentielles à points singuliers irréguliers (Séminaire Goulaouic-Schwartz 1976–1977). **(80f:58003)**
See also **Sebastiani, Marcos, (80k:32025)**
(Ramis, Jean-Pierre) *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Sebastiani, Marcos Monodromie et polynôme de Bernstein, d'après Malgrange. **(80k:32025)**
Complex fields *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Differential equations *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Equations différentielles et systèmes de Pfaff dans le champ complexe ★Équations différentielles et systèmes de Pfaff dans le champ complexe. **(80f:34003)**
Pfaff systems *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Séminaire:
Goulaouic-Schwartz *See* **Malgrange, B., (80f:58003)**
Equations Différentielles et Systèmes de Pfaff dans le Champ Complexe *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Strasbourg *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**

14D10 Arithmetic ground fields (finite, local, global)

14D15 Formal methods; deformations [See also 13D10, 14B07, 16A58, 32Gxx.]

Bierstone, Edward (*with* Milman, Pierre) Invariant solutions of analytic equations. **80k:14020**
Emsalem, Jacques Géométrie des points épais. (English summary) **80j:14008**
Milman, Pierre *See* **Bierstone, Edward, 80k:14020**
Rim, Dock S. Equivariant G-structure on versal deformations. **80k:14021**
Święcicka, Joanna Small deformations of Brauer-Severi schemes. (Russian summary) **80k:14022**
Wavrik, John J. Analytic equations and singularities of plane curves. **80a:14004**

Secondary classifications:

Bănică, Constantin Sur le complexe cotangent de Lichtenbaum et Schlessinger. (English summary) **(80d:32023)**
Becker, Joseph Higher derivations and integral closure. **(80a:13005)**
Herzog, Jürgen Ein Cohen-Macaulay-Kriterium mit Anwendungen auf den Konormalenmodul und den Differentialmodul. **(80a:13025)**
Kneser, Martin Konstruktive Lösung p-adischer Gleichungssysteme. **(80k:10027)**
Popescu, Dorin Algebraically pure morphisms. **(80j:13017)**
Trautmann, Günther Deformations of sheaves and bundles. **(80d:32026)**
Wahl, Jonathan M. Simultaneous resolution and discriminantal loci. **(80g:14006)**

14D20 Algebraic moduli problems {For analytic moduli problems, see 32G13.}

Ancona, Vincenzo Algébrisation des modifications analytiques. (Italian and English summaries) **80l:14004**
Morikawa, Hisasi Spaces of moduli of submodules of certain unipotent polynomial representations of nilpotent groups. **80k:14023**
Oort, Frans Singularities of coarse moduli schemes. **80e:14002**
Rapoport, M. Compactifications de l'espace de modules de Hilbert-Blumenthal. **80j:14009**
Raynaud, Michel Faisceaux amples et très amples (d'après T. Matsusaka). **80h:14005**
Shah, Jayant Stability of local rings of dimension 2. **80k:14024**
Szurek, Michał Specializations of hypersurfaces of degrees 2, 3 in P^n. (Russian summary) **80h:14006**

Secondary classifications:

Fujita, Takao Theory of the Kodaira dimension (its past, present, future). (Japanese) **(80a:14017)**
Hulek, Klaus Stable rank-2 vector bundles on P_2 with c_1 odd. **(80m:14011)**
Laudal, O. A. (*with* Lønsted, Knud) Deformations of curves. I. Moduli for hyperelliptic curves. **(80g:14027)**
Le Potier, J. Fibrés stables de rang 2 sur $P_2(C)$. **(80m:14012)**
Lindner, Martin Stratifizierung im Hilbertschema. II. Flächen mit gewöhnlichen Singularitäten. **(80f:14019)**
Lønsted, Knud *See* **Laudal, O. A., (80g:14027)**
Norton, V. Alan Analytic moduli of complex vector bundles. **(80d:32025)**
Prepeliță, Valeriu Réalisations canoniques des applications linéaires entrée-sortie à plusieurs indices. **(80a:93042)**
Rego, C. J. A note on one-dimensional Gorenstein rings. **(80c:14009)**
Sommese, Andrew John On the rationality of the period mapping. **(80d:14008)**

14D22 Fine structure of moduli spaces

Secondary classifications:

Hartshorne, Robin Stable vector bundles of rank 2 on P^3. **(80c:14011)**
Laudal, O. A. (*with* Lønsted, Knud) Deformations of curves. I. Moduli for hyperelliptic curves. **(80g:14027)**
Lønsted, Knud *See* **Laudal, O. A., (80g:14027)**

14D25 Geometric invariants [See also 14L30.]

Flatto, Leopold Invariants of finite reflection groups. **80j:14010**
Hesselink, Wim The normality of closures of orbits in a Lie algebra. **80g:14018**
Schwarz, Gerald W. Representations of simple Lie groups with a free module of covariants. **80c:14008**

Secondary classifications:

Bogomolov, F. A. Holomorphic tensors and vector bundles on projective manifolds. (Russian) **(80j:14014)**
Èlašvili, A. G. *See* **Vinberg, È. B., (80b:15039)**
Humphreys, J. E. Hilbert's fourteenth problem. **(80b:14021)**
Kempf, George R. The Hochster-Roberts theorem of invariant theory. **(80g:14040)**
Nakajima, Haruhisa Invariants of reflection groups in positive characteristics. **(80k:14019)**

Schwarz, Gerald W. Representations of simple Lie groups with regular rings of invariants. **(80m:14032)**
Vinberg, È. B. (*with* Èlašvili, A. G.) A classification of the three-vectors of nine-dimensional space. (Russian) **(80b:15039)**

14D99 None of the above, but in this section

Iitaka, Shigeru On the homogeneous Lüroth theorem. **80j:14011**

14Exx Mappings and correspondences

Secondary classifications:

Rawnsley, J. H. Differential geometry of instantons. **(80d:81081)**

14E05 Rational maps, birational correspondences

Artin, M. (*with* Schelter, W.) A version of Zariski's main theorem for polynomial identity rings. **80c:14003**
Bonardi, Maria Teresa Rational maps between projective spaces, obtained as extensions of a birational isomorphism between projective varieties. (Italian. English and French summaries) **80m:14007**
Danilov, V. I. Polyhedra of algebraic varieties and dominant morphisms. (Russian) **80b:14006**
Erastov, K. D. On the question of geometric correspondences. (Russian) **80b:14007**
Lewin-Ménégaux, Renée *See* **Martin-Deschamps, Mireille, 80m:14008**
Martin-Deschamps, Mireille (*with* Lewin-Ménégaux, Renée) Applications rationnelles séparables dominantes sur une variété de type général. (English summary) **80m:14008**
Schelter, W. *See* **Artin, M., 80c:14003**
Tsushima, Ryuji Rational maps to varieties of hyperbolic type. **80g:14019**

14E07 Structure of Cremona group and generalizations

Razar, Michael Polynomial maps with constant Jacobian. **80m:14009**

Secondary classifications:

Alperin, Roger Homology of the group of automorphisms of $k[x, y]$. **(80j:14047)**

14E10 General correspondences

Fried, Michael D. Poncelet correspondence: finite correspondence; Ritt's theorem; and the Griffiths-Harris configuration for quadrics. **80a:14005**
Ştefănescu, Doru On the epimorphism theorem. (Romanian. English summary) **80b:14008**

Secondary classifications:

Faltings, Gerd Über Macaulayfizierung. **(80c:14030)**

14E15 Global theory of singularities, resolution [See also 14B05, 32C45.]

Rego, C. J. A note on one-dimensional Gorenstein rings. **80c:14009**
Romo Santos, Concepción Resolution of singularities of algebroid varieties using quadratic transformations. I. (Spanish) **80b:14009**
Singh, Balwant On two numerical criteria for normal flatness in codimension one. **80j:14012**
Urabe, Tohsuke On Hironaka's monoideal. **80j:14013**
Valabrega, Paolo (*with* Valla, Giuseppe) Form rings and regular sequences. **80d:14010**
Valla, Giuseppe *See* **Valabrega, Paolo, 80d:14010**

Secondary classifications:

Langmann, Klaus (*with* Rotthaus, Christel) Über den regulären Ort bei japanischen lokalen Ringen. (English summary) **(80e:13003)**
Rotthaus, Christel *See* **Langmann, Klaus, (80e:13003)**

14E20 Coverings, fundamental group

Rotthaus, Christel Universell japanische Ringe mit nicht offenem regulärem Ort. **80b:14007**

Secondary classifications:

Razar, Michael Polynomial maps with constant Jacobian. **(80m:14009)**

14E22 Ramification problems [See also 12B10.]

14E25 Imbeddings

Dale, Magsar Embedding-obstruction for products of nonsingular, projective varieties. **80m:14010**
Manolache, Nicolae Meromorphic functions along a Segre-Veronese subvariety. **80g:14020**
Speiser, Robert Extending meromorphic functions on $\mathbf{P}^m \times \mathbf{P}^n$. **80g:14021**

Secondary classifications:

Chow, Wei Liang On the algebraicity of certain ringed spaces. **(80d:32030)**
Kulkarni, Ravindra S. P. A. Smith-theoretic algebro-geometric invariants of compact differentiable manifolds. **(80d:57012)**
Russell, Peter (*with* Sathaye, Avinash) On finding and cancelling variables in $k[X, Y, Z]$. **(80j:14030)**
Sathaye, Avinash *See* **Russell, Peter, (80j:14030)**

14E30 Minimal models

14E35 Results in dimension ≤ 3

Secondary classifications:

Laksov, Dan Secant bundles and Todd's formula for the double points of maps into $\mathbf{P}^n$. **(80c:14007)**

14E40 Local structure of maps: étale, flat, etc. [See also 13–XX, 14B25.]

Secondary classifications:

Simis, Aron Rationality criteria for algebraic varieties of dimension ≤ 3. (Portuguese) **(80k:14055)**

14E99 None of the above, but in this section

Casazza, Enrica (*with* Valenti, Enrico) Some observations on certain isomorphisms of projective varieties. (Italian. English summary) **80k:14025**
Valenti, Enrico *See* **Casazza, Enrica, 80k:14025**

Secondary classifications:

Huibregtse, Mark E. The Albanese mapping for a punctual Hilbert scheme. I. Irreducibility of the fibers. **(80g:14009)**
Skopec, Z. A. (*with* Tihomirov, A. S.) Mapping of some systems of quadratic manifolds of the space P_3 into the space P_9. (Russian) **(80k:14054)**
Tihomirov, A. S. *See* **Skopec, Z. A., (80k:14054)**

14Fxx Cohomology theory [See also 13Dxx.]

14F05 Vector bundles, sheaves, related constructions [See also 18F20, 46M20.]

Atiyah, Michael Francis Geometry of Yang-Mills fields. **80a:14006**
Barth, Wolf (*with* Elencwajg, G.) Concernant la cohomologie des fibres algébriques stables sur $\mathbf{P}_n(\mathbf{C})$. **80f:14004**
(*with* Hulek, Klaus) Monads and moduli of vector bundles. **80f:14005**
Beĭlinson, A. A. Coherent sheaves on $\mathbf{P}^n$ and problems in linear algebra. (Russian) **80c:14010b**
Bernštein, I. N. (*with* Gel'fand, I. M.; Gel'fand, S. I.) Algebraic vector bundles on $\mathbf{P}^n$ and problems of linear algebra. (Russian) **80c:14010a**
Bogomolov, F. A. Holomorphic tensors and vector bundles on projective manifolds. (Russian) **80j:14014**
Elencwajg, G. *See* **Barth, Wolf, 80f:14004**
Flexor, Marguerite (*with* Szpiro, Lucien) Un théorème de structure locale pour les complexes parfaits. **80k:14026**
Fujita, Takao An extendability criterion for vector bundles on ample divisors. **80f:14006**
Gel'fand, I. M. *See* **Bernštein, I. N.; et al., 80c:14010a**
Gel'fand, S. I. *See* **Bernštein, I. N.; et al., 80c:14010a**
Gieseker, D. On a theorem of Bogomolov on Chern classes of stable bundles. **80j:14015**
Haboush, W. J. Homogeneous vector bundles and reductive subgroups of reductive algebraic groups. **80f:14007**
Hartshorne, Robin Stable vector bundles of rank 2 on $\mathbf{P}^3$. **80c:14011**
Horrocks, G. Examples of rank three vector bundles on five-dimensional projective space. **80d:14011**
Hulek, Klaus Stable rank-2 vector bundles on $\mathbf{P}_2$ with c_1 odd. **80m:14011**
See also **Barth, Wolf, 80f:14005**
Jouanolou, J. P. Feuilles compactes des feuilletages algébriques. **80g:14022**
Lange, Herbert On stable and ample vector bundles of rank 2 on curves. **80c:14012**
On stable and uniform rank-2 vector bundles on P^2 in characteristic p. **80i:14005**
Le Potier, J. Fibrés stables de rang 2 sur $\mathbf{P}_2(\mathbf{C})$. **80m:14012**
Maruyama, Masaki On algebraic vector bundles. (Japanese) **80e:14004**
Matsunaga, Hiromichi On equivariant line bundles over some surfaces. **80a:14007**
Mulase, Motohico Poles of instantons and jumping lines of algebraic vector bundles on $\mathbf{P}^3$. **80f:14008**
Szpiro, Lucien *See* **Flexor, Marguerite, 80k:14026**
Trautmann, Günther Moduli for vectorbundles on $\mathbf{P}_n(\mathbf{C})$. **80a:14008**
Van de Ven, Antonius Le fibré normal d'une courbe dans $\mathbf{P}_3$ ne se décompose pas toujours. (English summary) **80k:14027**

Secondary classifications:

Andersen, Henning Haahr Cohomology of line bundles on G/B. **(80j:14044)**
The first cohomology group of a line bundle on G/B. **(80e:14025)**
Anderson, David F. Projective modules over subrings of $k[X, Y]$ generated by monomials. **(80g:13007)**
Bass, Hyman ★Projective modules and symmetric algebras. **(80i:13001)**
Benedetti, Riccardo (*with* Tognoli, Alberto) Sur les fibrés vectoriels algébriques réels. (English summary) **(80g:14025)**
Dennis, R. Keith (*with* Krusemeyer, Mark I.) $K_2(A[X, Y]/XY)$, a problem of Swan, and related computations. **(80j:18018)**
Drechsler, Konrad Homologie bei der Einpflanzung eines Faserbündels. **(80m:55023)**
Drinfel'd, V. G. (*with* Manin, Ju. I.) A description of instantons. **(80c:81061)**
El Zein, Fouad Complexe dualisant et applications à la classe fondamentale d'un cycle. (English summary) **(80h:14009)**

Fluxe, R. A local uniqueness theorem for (anti-) self-dual solutions of SU(2) Yang-Mills equations. **(80h:81048)**
Griffiths, Phillip A. (*with* Harris, Joseph) Residues and zero-cycles on algebraic varieties. **(80d:14006)**
Harris, Joseph *See* **Griffiths, Phillip A., (80d:14006)**
Kato, Goro C. *See* **Lubkin, Saul, (80d:55006)**
Kempf, George R. The Grothendieck-Cousin complex of an induced representation. **(80g:14042)**
Kopeiko, V. I. (*with* Suslin, A. A.) Quadratic modules over polynomial rings. (Russian) **(80k:13007)**
Krichever, I. M. (*with* Novikov, S. P.) Holomorphic vector bundles over Riemann surfaces and the Kadomcev-Petviašvili equation. I. (Russian) **(80i:35162)**
Rational solutions of duality equations for Yang-Mills fields. (Russian) **(80k:81101)**
Krusemeyer, Mark I. *See* **Dennis, R. Keith, (80j:18018)**
Lissner, David (*with* Lønsted, Knud) Reduction of projective modulus in ring extensions. **(80c:13004)**
Lønsted, Knud *See* **Lissner, David, (80c:13004)**
Lubkin, Saul (*with* Kato, Goro C.) Second Leray spectral sequence of relative hypercohomology. **(80d:55006)**
Manin, Ju. I. Matrix solitons and vector bundles over curves with singularities. (Russian) **(80g:35114)**
See also **Drinfel'd, V. G., (80c:81061)**
Novikov, S. P. *See* **Krichever, I. M., (80i:35162)**
Ojanguren, Manuel Formes quadratiques sur les algèbres de polynomes. (English summary) **(80a:15028)**
Papantonopoulou, Aigli Surfaces in the Grassmann variety $G(1, 3)$. **(80j:14045)**
Rees, Elmer Some rank two bundles on $P_n\mathbf{C}$, whose Chern classes vanish. **(80f:55016)**
Suslin, A. A. *See* **Kopeiko, V. I., (80k:13007)**
Tognoli, Alberto *See* **Benedetti, Riccardo, (80g:14025)**

14F07 Weierstrass points in one and several variables; gap sheaves

Homma, Masaaki On Weierstrass points of Riemann surfaces associated with $\Gamma(n, 2n)$. **80j:14016**
Iitaka, Shigeru An index formula for linear systems and transformations of Weierstrass points. (Japanese) **80c:14013**
Moh, T. T. On Weierstrass points of analytic plane curves and a conjecture of Mumford. **80c:14014**

Secondary classifications:

Duma, Andrei Holomorphe Differentiale höherer Ordnung auf kompakten Riemannschen Flächen. **(80g:14026)**
Henn, Hans-Wolfgang Minimalanzahl von Weierstrasspunkten. **(80c:14016)**
Horiuchi, Ryutaro Normal coverings of hyperelliptic Riemann surfaces. **(80k:30044)**

14F10 Differentials and other special sheaves

Blass, Piotr (*with* Lipman, Joseph) Remarks on adjoints and arithmetic genera of algebraic varieties. **80j:14017**
Faltings, Gerd Zur Existenz dualisierender Komplexe. **80b:14010**
Iitaka, Shigeru Duality theorems for symmetric differential forms. **80j:14018**
Kunz, Ernst Differentialformen auf algebraischen Varietäten mit Singularitäten. II. **80b:14011**
Lipman, Joseph *See* **Blass, Piotr, 80j:14017**
Nygaard, Niels O. Closedness of regular 1-forms on algebraic surfaces. **80j:14019**
Preuss, Dietmar Residuen symmetrischer differentialformenwertiger Bilinearformen. **80e:14005**

Secondary classifications:

Berndt, Rolf Arithmetisch ganze Differentiale. **(80f:12024)**
Bogomolov, F. A. Holomorphic symmetric tensors on projective surfaces. (Russian) **(80c:14025)**
Fujita, Takao The sheaf of relative canonical forms of a Kähler fiber space over a curve. **(80b:14004)**
Hopkins, Glenn W. (*with* Lipman, Joseph) An elementary theory of Grothendieck's residue symbol. **(80j:14003)**
Lipman, Joseph *See* **Hopkins, Glenn W., (80j:14003)**
Mori, Shigefumi (*with* Sumihiro, Hideyasu) On Hartshorne's conjecture. **(80j:14033)**
Picco Botta, Luciana (*with* Verra, Alessandro) Some duality properties for geometrically linked schemes. (Italian. English summary) **(80f:14026)**
Sumihiro, Hideyasu *See* **Mori, Shigefumi, (80j:14033)**
Verra, Alessandro *See* **Picco Botta, Luciana, (80f:14026)**

14F12 Riemann-Roch problems [See mainly 14C40, also 32L10, 57R20.]

Fulton, William A fixed point formula for varieties over finite fields. **80a:14009**

Secondary classifications:

MacPherson, Robert Characteristic classes for singular varieties. **(80g:57031)**

14F15 Serre cohomology, K-theory [See also 13D15, 18F25.]

Geller, Susan C. (*with* Roberts, Leslie G.) Excision and K_1 regularity for curves with normal crossings. **80k:14028**
Roberts, Leslie G. *See* **Geller, Susan C., 80k:14028**
Sherman, Clayton C. Some theorems on the K-theory of coherent sheaves. **80k:14029**

Secondary classifications:

Stoia, Manuela The singular set of a sheaf. (Romanian. English summary) **(80k:14010)**

14F20 Grothendieck cohomology and topology [See also 18F10.]

Colliot-Thélène, Jean-Louis (*with* Sansuc, Jean-Jacques) Cohomologie des groupes de type multiplicatif sur les schémas réguliers. (English summary) **80a:14010**
Cox, David A. The étale homotopy type of varieties over **R**. **80f:14009**
Sansuc, Jean-Jacques *See* **Colliot-Thélène, Jean-Louis, 80a:14010**
Šehtman, V. V. Algebraic K-theory and characteristic classes. (Russian) **80k:14030**
Correction: "Algebraic K-theory and characteristic classes" [Uspehi Mat. Nauk 33 (1978), no. 6(204), 239–240]. (Russian) **80k:14031**
Treger, Robert On p-torsion in etale cohomology and in the Brauer group. **80k:14032**

Secondary classifications:

Bijan-Zadeh, Mohammad H. (*with* Sharp, Rodney Y.) On Grothendieck's local duality theorem. **(80h:13017)**
Hall, Janet E. Fundamental dualizing complexes for commutative Noetherian rings. **(80h:13016)**
Nygaard, Niels O. Closedness of regular 1-forms on algebraic surfaces. **(80j:14019)**
Sharp, Rodney Y. *See* **Bijan-Zadeh, Mohammad H., (80h:13017)**

14F25 Classical real and complex cohomology

Silhol, R. Nullité de certains groupes de cohomologie des variétés sur un corps non algébriquement clos. (English summary) **80m:14013**

14F30 p-adic cohomology, crystalline cohomology

Lubkin, Saul Finite generations of lifted p-adic homology with compact supports. Generalization of the Weil conjectures to singular, noncomplete algebraic varieties. **80m:14014**
Finite generation of lifted p-adic homology with compact supports. Generalization of the Weil conjectures to singular, noncomplete algebraic varieties. **80h:14008**
Ogus, A. Griffiths transversality in crystalline cohomology. **80d:14012**

Secondary classifications:

Gross, Benedict H. (*with* Koblitz, Neal) Gauss sums and the p-adic Γ-function. **(80g:12015)**
Koblitz, Neal *See* **Gross, Benedict H., (80g:12015)**
Nygaard, Niels O. A p-adic proof of the nonexistence of vector fields on $K3$ surfaces. **(80m:14024)**

14F35 Homotopy theory

Cherenack, Paul Basic aspects of unirational homotopy theory. **80f:14010**

14F40 de Rham cohomology [See also 14C30, 32C35, 32L10.]

El Zein, Fouad Complexe dualisant et applications à la classe fondamentale d'un cycle. (English summary) **80h:14009**
Terao, Hiroaki The rational forms on the weighted projective space and the filtration by the order of pole. **80i:14006**

Secondary classifications:

Griffiths, Phillip A. A theorem concerning the differential equations satisfied by normal functions associated to algebraic cycles. **(80k:14016)**
Morgan, John W. The algebraic topology of smooth algebraic varieties. **(80e:55020)**
Neisendorfer, Joseph (*with* Taylor, Laurence R.) Dolbeault homotopy theory. **(80f:32004)**
Nygaard, Niels O. Closedness of regular 1-forms on algebraic surfaces. **(80j:14019)**
Taylor, Laurence R. *See* **Neisendorfer, Joseph, (80f:32004)**

14F45 Topological properties

Libgober, Anatoly On the topology of some even-dimensional algebraic hypersurfaces. **80k:14033**

Secondary classifications:

MacPherson, Robert Characteristic classes for singular varieties. **(80g:57031)**
McCrory, Clint Stratified general position. **(80m:57016)**

14F99 None of the above, but in this section

Palleschi, Marino Remarks on the regularity of the adjoint to an ample system of hypersurfaces on an algebraic variety. (Italian. English summary) **80k:14034**

Secondary classifications:

Morava, Jack Hypercohomology of topological categories. **(80e:55040)**
Mumford, David Some footnotes to the work of C. P. Ramanujam. **(80m:14026)**

14Gxx Special ground fields, arithmetic problems (For complex multiplication, see 10D25, 14K22. For automorphic and modular functions and forms, see also 10Dxx, 14K15.)

14G05 Rationality questions

Adkins, William A. (*with* Gianni, P.; Tognoli, Alberto) A Nullstellensatz for an algebraically non-closed field. (Italian summary) **80d:14013**
Čistov, A. L. The number of generators of the semigroup of stable equivalence classes of algebraic tori. (Russian) **80b:14012**
Dem'janenko, V. A. The orders of the torsion of points of curves of genus 1. (Russian) **80j:14020**
Gianni, P. *See* **Adkins, William A.; et al., 80d:14013**
Tognoli, Alberto *See* **Adkins, William A.; et al., 80d:14013**
Voskresenskiĭ, V. E. *R*-equivalence questions on semisimple groups. (Russian) **80j:14021**

Secondary classifications:

Cassels, J. W. S. A Diophantine equation over a function field. **(80a:10030)**
Colliot-Thélène, Jean-Louis Formes quadratiques multiplicatives et variétés algébriques. **(80g:14014)**
Fried, Michael D. (*with* Jarden, Moshe) Diophantine properties of subfields of $\bar{\mathbf{Q}}$. **(80e:12027)**
Jarden, Moshe *See* **Fried, Michael D., (80e:12027)**
Katsura, Toshiyuki *See* **Shioda, Tetsuji, (80g:14033)**
Kotov, S. V. (*with* Trelina, L. A.) *S*-ganze Punkte auf elliptischen Kurven. **(80b:10024)**
Shioda, Tetsuji (*with* Katsura, Toshiyuki) On Fermat varieties. **(80g:14033)**
Trelina, L. A. *See* **Kotov, S. V., (80b:10024)**

14G10 Zeta functions and related questions [See also 12A70, 12B30.]

Arthaud, Nicole On Birch and Swinnerton-Dyer's conjecture for elliptic curves with complex multiplication. I. **80b:14013**
Odoni, R. W. K. A proof by classical methods of a result of Ax on polynomial congruences modulo a prime. **80f:14011**

Secondary classifications:

Báyer, Pilar (*with* Neukirch, Jürgen) On values of zeta functions and l-adic Euler characteristics. **(80b:12009)**
Goldfeld, D. (*with* Viola, C.) Mean values of L-functions associated to elliptic, Fermat and other curves at the centre of the critical strip. **(80j:10046)**
Neukirch, Jürgen *See* **Báyer, Pilar, (80b:12009)**
Viola, C. *See* **Goldfeld, D., (80j:10046)**

14G13 Weil-Tate conjectures [See also 14Cxx.]

Shioda, Tetsuji The Hodge conjecture for Fermat varieties. **80k:14035**
The Hodge conjecture and the Tate conjecture for Fermat varieties. **80e:14006**

Secondary classifications:

Igusa, Jun-ichi ★Forms of higher degree. **(80m:10020)**
Knižnerman, L. A. (*with* Sokolinskiĭ, V. Z.) Some estimates for rational trigonometric sums and sums of Legendre symbols. (Russian) **(80j:10045)**
Lubkin, Saul Finite generations of lifted p-adic homology with compact supports. Generalization of the Weil conjectures to singular, noncomplete algebraic varieties. **(80m:14014)**
Finite generation of lifted p-adic homology with compact supports. Generalization of the Weil conjectures to singular, noncomplete algebraic varieties. **(80h:14008)**
Sokolinskiĭ, V. Z. *See* **Knižnerman, L. A., (80j:10045)**
Spackman, Kenneth W. Simultaneous solutions to diagonal equations over finite fields. **(80f:10017)**
Stepanov, S. A. An elementary method in algebraic number theory. (Russian) **(80c:10043)**

14G15 Finite ground fields

Parišin, A. N. Abelian coverings of arithmetic schemes. (Russian) **80b:14014**
Singh, Sahib Integer points on special hyper-elliptic curves in GF(p). **80k:14036**
Vvedens'kiĭ, O. M. Computation of the Selmer group and order of divisibility of the elements ш in the groups $H^1(K, E; q)$ of an elliptic curve. (Russian. English summary) **80e:14007**

Secondary classifications:

Nakamura, Tetsuo A note on endomorphism rings of abelian varieties over finite fields. **(80g:14036)**
Stepanov, S. A. An elementary method in algebraic number theory. (Russian) **(80c:10043)**

14G20 p-adic ground fields (local fields)

Boech, Siegfried Multiplikative Untergruppen in abeloiden Mannigfaltigkeiten. **80d:14014**
Christol, Gilles *Frobenius structures for differential equations.* **80b:14015**

Secondary classifications:

Andrijčuk, V. I. Distinguishing the class of general local fields with residue characteristics $p < 3$, for which the Tate-Šafarevič pairing on elliptic curves is nondegenerate from the left. (Russian. English summary) **(80e:14016)**
Kiehne, Ursel Zeros of polynomials over valued fields. **(80f:12019)**
Kneser, Martin Konstruktive Lösung p-adischer Gleichungssysteme. **(80b:10027)**
Morita, Yasuo Krasner's analytic functions and rigid analytic spaces. **(80e:12032)**
Yui, Noriko Elliptic curves and canonical subgroups of formal groups. **(80e:14027)**

14G25 Global ground fields

Fried, Ervin (*with* Kollár, János) Automorphism groups of algebraic number fields. **80d:14015**
Geyer, Wulf-Dieter (*with* Jarden, Moshe) Torsion points of elliptic curves over large algebraic extensions of finitely generated fields. **80d:14016**
Gordon, W. J. Linking the conjectures of Artin-Tate and Birch-Swinnerton-Dyer. **80h:14010**
Ishii, Hidenori The nonexistence of elliptic curves with everywhere good reduction over certain imaginary quadratic fields. **80j:14022**
Jarden, Moshe *See* **Geyer, Wulf-Dieter, 80d:14016**
Kenku, M. A. The modular curve $X_0(39)$ and rational isogeny. **80g:14023**
Kollár, János *See* **Fried, Ervin, 80d:14015**
Mazur, B. Modular curves and the Eisenstein ideal. **80c:14015**
Nakata, Kumiko On some elliptic curves defined over Q of free rank > 9. **80k:14037**
Vélu, Jacques Courbes elliptiques munies d'un sous-groupe $\mathbf{Z}/n\mathbf{Z} \times \mu_n$. **80a:14011**
Zimmer, Horst G. Quasifunctions on elliptic curves over local fields. **80g:14024**

Secondary classifications:

Bertrand, Daniel Fonctions modulaires, courbes de Tate et indépendance algébrique. **(80c:10035)**
(Goldfeld, D.) *See* **Mazur, B., (80h:14022)**
Harris, Michael p-adic representations arising from descent on abelian varieties. **(80j:14035)**
Kenku, M. A. Certain torsion points on elliptic curves defined over quadratic fields. **(80g:14035)**
Koblitz, Neal (*with* Rohrlich, David) Simple factors in the Jacobian of a Fermat curve. **(80d:14022)**
Kotov, S. V. (*with* Trelina, L. A.) *S*-ganze Punkte auf elliptischen Kurven. **(80b:10024)**
Kubert, Daniel Sion Universal bounds on the torsion of elliptic curves. **(80i:14014)**
Kurihara, Akira On some examples of equations defining Shimura curves and the Mumford uniformization. **(80e:14010)**
Lang, Serge Sur la conjecture de Birch-Swinnerton-Dyer (d'après J. Coates et A. Wiles). **(80f:12012)**
Mazur, B. Rational isogenies of prime degree (with an appendix by D. Goldfeld). **(80h:14022)**
Rohrlich, David *See* **Koblitz, Neal, (80d:14022)**
Stroeker, R. J. A class of Diophantine equations connected with certain elliptic curves over $\mathbf{Q}(\sqrt{-13})$. **(80e:10019)**
Trelina, L. A. *See* **Kotov, S. V., (80b:10024)**
Vvedens'kiĭ, O. M. Computation of the Selmer group and order of divisibility of the elements ш in the groups $H^1(K, E; q)$ of an elliptic curve. (Russian. English summary) **(80e:14007)**
Pairings in elliptic curves over global fields. (Russian) **(80j:14037)**
Yui, Noriko A note on formal groups and zeta functions. **(80e:14029)**

14G30 Real ground fields [See also 32C05. Must also be assigned at least one other number referring to the specific type of problem considered.]

Benedetti, Riccardo (*with* Tognoli, Alberto) Sur les fibrés vectoriels algébriques réels. (English summary) **80g:14025**
Tognoli, Alberto *See* **Benedetti, Riccardo, 80g:14025**

Secondary classifications:

Efroymson, Gustave A. Nash rings on planar domains. **(80b:14018)**
Nikulin, V. V. Integer symmetric bilinear forms and some of their geometric applications. (Russian) **(80j:10031)**
Rassias, Themistocles M. On Hilbert's sixteenth problem. **(80k:14043)**
Seppälä, Mika Teichmüller spaces of Klein surfaces. **(80g:32043)**
Silhol, R. Nullité de certains groupes de cohomologie des variétés sur un corps non algébriquement clos. (English summary) **(80m:14013)**
Terao, Hiroaki The rational forms on the weighted projective space and the filtration by the order of pole. **(80i:14006)**

14G99 None of the above, but in this section

Secondary classifications:

Colliot-Thélène, Jean-Louis (*with* Sansuc, Jean-Jacques) Cohomologie des groupes de type multiplicatif sur les schémas réguliers. (English summary) **(80a:14010)**
Sansuc, Jean-Jacques *See* **Colliot-Thélène, Jean-Louis, (80a:14010)**

14Hxx Curves

14H05 Algebraic functions [See also 14K20, 32G20.]

Duma, Andrei Holomorphe Differentiale höherer Ordnung auf kompakten Riemannschen Flächen. **80g:14026**
Heinzer, William *See* **Moh, T. T., 80c:14017**
Henn, Hans-Wolfgang Minimalanzahl von Weierstrasspunkten. **80c:14016**
Funktionenkörper mit grosser Automorphismengruppe. **80a:14012**
Moh, T. T. (*with* Heinzer, William) A generalized Lüroth theorem for curves. **80c:14017**
Stichtenoth, Henning p-Klassengruppen algebraischer Funktionenkörper. **80m:14015**

Secondary classifications:

Kuribayashi, Akikazu (*with* Moriya, Ryoji) On the automorphisms of Riemann surfaces defined by the equation $^3 = X(X-1)(X-t_1)(X-t_2)$. **(80g:14030a)**

(*with* Yoshida, Katsuaki) On the non-hyperelliptic compact Riemann surfaces defined by $Y^4 = X(X-1)(X-t)$. **(80g:14030b)**

Madden, Daniel J. Arithmetic in generalized Artin-Schreier extensions of $k(x)$. **(80d:12009)**

Moriya, Ryoji *See* **Kuribayashi, Akikazu, (80g:14030a)**

Staut, W. Maximale Ideale von k-Algebren und Systeme 2-rangiger Stellen in algebraischen Funktionenkörpern. **(80f:12025)**

Stichtenoth, Henning ★Algebraische Funktionenkörper einer Variablen. **(80i:14002)**

Yoshida, Katsuaki *See* **Kuribayashi, Akikazu, (80g:14030b)**

14H10 Families, moduli (algebraic)

Arbarello, Enrico (*with* Sernesi, Edoardo) The equation of a plane curve. **80e:14008**

Chang, Hyokang On plane algebraic curves. **80f:14012**

Kleiman, Steven L. *See* **Lønsted, Knud, 80g:14028**

Lanteri, Antonio (*with* Struppa, Daniele) Degenerations of compact surfaces and the Enriques degeneration principle. (Italian. English summary) **80i:14007**

Laudal, O. A. (*with* Lønsted, Knud) Deformations of curves. I. Moduli for hyperelliptic curves. **80g:14027**

Lønsted, Knud (*with* Kleiman, Steven L.) Basics on families of hyperelliptic curves. **80g:14028**

See also **Laudal, O. A., 80g:14027**

Recillas Pishmish, Sevín Morphisms between spaces of isomorphism classes of ramified covers of P^1_C. (Spanish) **80k:14038**

Sernesi, Edoardo *See* **Arbarello, Enrico, 80e:14008**

Struppa, Daniele *See* **Lanteri, Antonio, 80i:14007**

Tannenbaum, Allen Irreducible components of the Chow scheme of space curves. **80c:14018**

Wall, C. T. C. Affine cubic functions. I. The complex plane. **80h:14011**

14H15 Families, moduli (analytic) [See also 30F10, 32G15, 32G20.]

Arbarello, Enrico On subvarieties of the moduli space of curves of genus g defined in terms of Weierstrass points. (Italian summary) **80f:14013**

Granger, Jean-Michel Sur un espace de modules de germe de courbe plane. (English summary) **80f:14014**

Secondary classifications:

Patterson, David B. The fundamental group of the modulus space. **(80g:32042)**

Seppälä, Mika Teichmüller spaces of Klein surfaces. **(80g:32043)**

14H20 Singularities, local rings [See also 13Hxx.]

Abhyankar, Shreeram S. ★Lectures on expansion techniques in algebraic geometry. **80m:14016**

Casas Alvero, Eduardo The generic plane projection of a branch of a skew curve. (Spanish) **80m:14017**

Delorme, Charles Sur les modules des singularités des courbes planes. **80c:14019**

Kunz, Ernst Quasihomogeneous singularities of algebraic curves. **80f:14015**

Moh, T. T. On generators of ideals. **80g:14029**

Mori, Shigefumi The endomorphism rings of some abelian varieties. II. **80e:14009**

Oka, Mutsuo On the fundamental group of the complement of certain plane curves. **80d:14017**

Oneto, Anna Conductor and true adjoints to a curve on a surface. (Italian. English summary) **80k:14039**

Sinis, Aron A note on the Koszul homology of ordinary singularities. **80j:14023**

(Singh, Balwant) *See* **Abhyankar, Shreeram S., 80m:14016**

Wang, Kai On the characteristic polynomials of isolated complete intersection singularities. **80d:14018**

Yoshihara, Hisao On plane rational curves. **80f:14016**

Secondary classifications:

Arbarello, Enrico (*with* Sernesi, Edoardo) Petri's approach to the study of the ideal associated to a special divisor. **(80c:14020)**

Čerednik, I. V. Differential equations for Baker-Ahiezer functions of algebraic curves. (Russian) **(80g:35108)**

Homma, Masaaki On Weierstrass points of Riemann surfaces associated with $\Gamma(n, 2n)$. **(80j:14016)**

Hovanskiĭ, A. G. The index of a polynomial vector field. (Russian) **(80f:58033)**

Iitaka, Shigeru On Kodaira dimension of graphs. **(80j:14027)**

Lanteri, Antonio (*with* Struppa, Daniele) Degenerations of compact surfaces and the Enriques degeneration principle. (Italian. English summary) **(80i:14007)**

Manin, Ju. I. Matrix solitons and vector bundles over curves with singularities. (Russian) **(80g:35114)**

Sernesi, Edoardo *See* **Arbarello, Enrico, (80c:14020)**

Sinis, Aron Koszul homology and its syzygy-theoretic part. **(80c:13011)**

Struppa, Daniele *See* **Lanteri, Antonio, (80i:14007)**

14H25 Arithmetic ground fields [See also 10Bxx, 14Gxx.]

Nyman, T. (*with* Whaples, G.) Hasse's principle for simple algebras over function fields of curves. I. Algebras of index 2 and 3; curves of genus 0 and 1. **80a:14013a**

(*with* Whaples, G.) Correction to the paper: "Hasse's principle for simple algebras over function fields of curves. I" (*J.* Reine Angew. Math. **299/300** (1978), 396–405). **80a:14013b**

Whaples, G. *See* **Nyman, T., 80a:14013a** *and* **Nyman, T., 80a:14013b**

Secondary classifications:

Koblitz, Neal (*with* Rohrlich, David) Simple factors in the Jacobian of a Fermat curve. **(80d:14022)**

Naruki, Isao Über die Kleinsche Ikosaeder-Kurve sechsten Grades. **(80d:14021)**

Rohrlich, David *See* **Koblitz, Neal, (80d:14022)**

14H30 Coverings, fundamental group

Kato, Takao On criteria of $\tilde{g}$-hyperellipticity. **80k:14040**

Secondary classifications:

Arbarello, Enrico On subvarieties of the moduli space of curves of genus g defined in terms of Weierstrass points. (Italian summary) **(80f:14013)**

Cohen, Jeffrey M. On Hurwitz extensions by $PSL_2(7)$. **(80j:30069)**

Horiuchi, Ryutaro Normal coverings of hyperelliptic Riemann surfaces. **(80k:30044)**

Kato, Takao Non-hyperelliptic Weierstrass points of maximal weight. **(80b:30040)**

Mednyh, A. D. Unramified coverings of compact Riemann surfaces. (Russian) **(80d:30041)**

Recillas Pishmish, Sevín Morphisms between spaces of isomorphism classes of ramified covers of P^1_C. (Spanish) **(80k:14038)**

Schuppar, Berthold Elementare Aussagen zur Arithmetik und Galoistheorie von Funktionenkörpern. **(80m:12011)**

14H35 Correspondences [See also 14Exx.]

Accola, Robert D. M. On Castelnuovo's inequality for algebraic curves. I. **80k:14008**

Ciliberto, Ciro On systems of correspondences with valency of an algebraic curve into itself. (Italian) **80f:14017**

Systems of correspondences of an elliptic curve into itself. (Italian. English summary) **80k:14041**

Kuribayashi, Akikazu (*with* Moriya, Ryoji) On the automorphisms of Riemann surfaces defined by the equation $Y^3 = X(X-1)(X-t_1)(X-t_2)$. **80g:14030a**

(*with* Yoshida, Katsuaki) On the non-hyperelliptic compact Riemann surfaces defined by $Y^4 = X(X-1)(X-t)$. **80g:14030b**

Moriya, Ryoji *See* **Kuribayashi, Akikazu, 80g:14030a**

Yoshida, Katsuaki *See* **Kuribayashi, Akikazu, 80g:14030b**

Secondary classifications:

Conte, A. (*with* Murre, J. P.) The Hodge conjecture for fourfolds admitting a covering by rational curves. **(80a:14018)**

Murre, J. P. *See* **Conte, A., (80a:14018)**

14H40 Jacobians [See also 32G20.]

Earle, Clifford J. Some Jacobian varieties which split. **80m:14018**

Secondary classifications:

Frey, Gerhard On the structure of the class group of a function field. **(80m:12010)**

Griffiths, Phillip A. Complex analysis and algebraic geometry. **(80i:14003)**

Stichtenoth, Henning p-Klassengruppen algebraischer Funktionenkörper. **(80m:14015)**

14H45 Special curves

Arbarello, Enrico (*with* Sernesi, Edoardo) Petri's approach to the study of the ideal associated to a special divisor. **80c:14020**

Bernardi, Marco (*with* Liburdi, Arrigo) Harnack's problems concerning the real algebraic curves of the real ruled cubic normal of the space S_4. I. (Italian. English summary) **80b:14016**

Edge, W. L. A canonical curve of genus 6. **80b:14017**

Bring's curve. **80a:14014**

Green, Mark L. On the analytic solution of the equation of fifth degree. **80c:14021**

Ignatenko, V. F. Plane algebraic curves with axes of symmetry. (Russian) **80d:14020**

Liburdi, Arrigo *See* **Bernardi, Marco, 80b:14016**

Sernesi, Edoardo *See* **Arbarello, Enrico, 80c:14020**

Stoljarova, L. P. Mapping of the manifold of space quartics at points of P_4. (Russian) **80m:14019**

Tannenbaum, Allen On the geometric genera of projective curves. **80c:14022**

de Vito, Paola (*with* Zirilli, Francesco) Normal elliptic curves and C^{n+1}-systems. (Italian) **80d:14019**

Wall, C. T. C. Note on the invariant of plane cubics. **80g:14031**

Zirilli, Francesco *See* **de Vito, Paola, 80d:14019**

Secondary classifications:

Canuto, Giuseppe Associated curves and Plücker formulas in Grassmannians. **(80m:14035)**

Ghione, Franco (*with* Lascu, Alexandru T.) Unisecant curves on a general ruled surface. **(80f:14018)**

Griffiths, Phillip A. (*with* Harris, Joseph) Two proofs of a theorem concerning algebraic space curves. **(80d:14027)**

Harris, Joseph *See* **Griffiths, Phillip A., (80d:14027)**

Hartshorne, Robin Complete intersections in characteristic $p > 0$. **(80d:14028)**

Lascu, Alexandru T. *See* **Ghione, Franco, (80f:14018)**

McKean, H. P. (*with* Trubowitz, E.) Hill's surfaces and their theta functions. **(80b:30039)**

van Moerbeke, Pierre (*with* Mumford, David) The spectrum of difference operators and algebraic curves. **(80e:58028)**

Mumford, David *See* **van Moerbeke, Pierre, (80e:58028)**

Singh, Sahib Integer points on special hyper-elliptic curves in GF(p). **(80k:14036)**
Trubowitz, E. *See* **McKean, H. P., (80b:30039)**

14H99 None of the above, but in this section

Kurihara, Akira On some examples of equations defining Shimura curves and the Mumford uniformization. **80e:14010**
Natanzon, S. M. Automorphisms and real forms of a class of complex algebraic curves. (Russian) **80k:14042**
Ness, Linda Curvature on the Fermat cubic. **80m:14020**
Rassias, Themistocles M. On Hilbert's sixteenth problem. **80k:14043**

Secondary classifications:

Accola, Robert D. M. On certain subloci of Teichmüller space. **(80m:32026)**
Cherenack, Paul Basic aspects of unirational homotopy theory. **(80f:14010)**
Chern, Shiing Shen (*with* Griffiths, Phillip A.) Abel's theorem and webs. **(80b:53008)**
Fempl, Stanimir Über eine Kurve deren Quadratur auf ein hyperelliptisches Integral führt. **(80k:33002)**
Griffiths, Phillip A. *See* **Chern, Shiing Shen, (80b:53008)**
Le Barz, Patrick Géométrie énumérative pour les multisécantes. **(80m:14039)**
Švarcman, O. V. *See* **Vinberg, È. B., (80k:30047)**
Vinberg, È. B. (*with* Švarcman, O. V.) Riemann surfaces. (Russian) **(80k:30047)**

14Jxx Surfaces and higher-dimensional varieties

14J05 Picard group

Efroymson, Gustave A. Nash rings on planar domains. **80b:14018**
Ghione, Franco (*with* Lascu, Alexandru T.) Unisecant curves on a general ruled surface. **80f:14018**
Jensen, Sven Toft Picard schemes of quotients by finite commutative group schemes. **80a:14015**
Lascu, Alexandru T. *See* **Ghione, Franco, 80f:14018**

Secondary classifications:

Cumino, Caterina On the seminormality of algebraic surfaces. (Italian) **(80i:14009)**

14J10 Families, moduli, classification: algebraic theory

Horikawa, Eiji Algebraic surfaces of general type with small c_1^2. III. **80h:14012a**
Algebraic surfaces of general type with small c_1^2. IV. **80h:14012b**
Iskovskih, V. A. Fano threefolds. I. (Russian) **80c:14023a**
Fano threefolds. II. (Russian) **80c:14023b**
Minimal models of rational surfaces over arbitrary fields. (Russian) **80m:14021**
Lewin-Ménégaux, Renée *See* **Martin-Deschamps, Mireille, 80e:14011**
Libgober, Anatoly On the fundamental group of the space of cubic surfaces. **80a:14016**
Lindner, Martin Stratifizierung im Hilbertschema. II. Flächen mit gewöhnlichen Singularitäten. **80f:14019**
Martin-Deschamps, Mireille (*with* Lewin-Ménégaux, Renée) Surfaces de type général dominées par une variété fixe. (English summary) **80e:14011**
Piene, Ragni A proof of Noether's formula for the arithmetic genus of an algebraic surface. **80j:14024**
Van de Ven, Antonius On the Enriques classification of algebraic surfaces. **80j:14025**
Wilson, P. M. H. The arithmetic plurigenera of surfaces. **80j:14026**

Secondary classifications:

Mandelbaum, Richard Decomposing analytic surfaces. **(80h:57013)**
Miyanishi, Masayoshi Unirational quasi-elliptic surfaces. **(80m:14022)**
Raynaud, Michel Faisceaux amples et très amples (d'après T. Matsusaka). **(80h:14005)**
Rudakov, A. N. (*with* Šafarevič, I. R.) Supersingular $K3$ surfaces over fields of characteristic 2. (Russian) **(80e:14015)**
(*with* Šafarevič, I. R.) Vector fields on elliptic surfaces. (Russian) **(80f:14022)**
Šafarevič, I. R. *See* **Rudakov, A. N., (80e:14015)** *and* **Rudakov, A. N., (80f:14022)**
Szurek, Michał Specializations of hypersurfaces of degrees 2, 3 in P^n. (Russian summary) **(80h:14006)**

14J15 Moduli, classification: analytic theory [See also 32J15.]

Fujita, Takao Theory of the Kodaira dimension (its past, present, future). (Japanese) **80a:14017**
Iitaka, Shigeru Minimal models in proper birational geometry. **80h:14013**

Secondary classifications:

Peters, C. A. M. Holomorphic automorphisms of compact Kähler surfaces and their induced actions in cohomology. **(80h:32050)**
Peters, Chris On the local Torelli theorem, a review of known results. **(80d:14007)**

14J17 Singularities of surfaces

Abhyankar, Shreeram S. Quasirational singularities. **80h:14014**
Campillo Lopez, Antonio Generic plane section of an algebroid surface over a field of arbitrary characteristic. (Spanish) **80k:14044**
Cumino, Caterina On the seminormality of algebraic surfaces. (Italian) **80i:14009**
Gonzalez-Sprinberg, Gerardo Calcul de l'invariant local d'Euler pour les singularités quotient de surfaces. (English summary) **80h:14015**
Iitaka, Shigeru On Kodaira dimension of graphs. **80j:14027**
Piccolella, Lia Fioravanti Hyperspatial surfaces in the neighborhood of a point of inflexion. (Italian. English summary) **80e:14012**
Stagnaro, Ezio On the maximum number of isolated double points of an algebraic surface of P^3. (Italian. English summary) **80i:14010**
Wahl, Jonathan M. Simultaneous resolution of rational singularities. **80e:14013**
Watanabe, Kimio *See* **Yoshinaga, Etsuo, 80g:14032**
Yau, Stephen Shing Toung Normal singularities of surfaces. **80f:14020**
Yoshinaga, Etsuo (*with* Watanabe, Kimio) On the geometric genus and the inner modality of quasihomogeneous isolated singularities. **80g:14032**

Secondary classifications:

Bruce, J. W. (*with* Wall, C. T. C.) On the classification of cubic surfaces. **(80f:14021)**
Casas Alvero, Eduardo One-dimensional singularities of an algebraic surface. (Spanish) **(80g:14005)**
Dixon, David Joseph The fundamental divisor of normal double points of surfaces. **(80j:14001)**
Fenn, Roger A. (*with* Taylor, Paul) Introducing doodles. **(80k:57010)**
Lê Dũng Tráng (*with* Perron, Bernard) Sur la fibre de Milnor d'une singularité isolée en dimension complexe trois. (English summary) **(80k:32009)**
Libgober, Anatoly On the fundamental group of the space of cubic surfaces. **(80a:14016)**
Lipman, Joseph Double point resolutions of deformations of rational singularities. **(80g:14007)**
Neumann, Walter D. (*with* Raymond, Frank) Seifert manifolds, plumbing, μ-invariant and orientation reversing maps. **(80e:57008)**
Nikulin, V. V. Integer symmetric bilinear forms and some of their geometric applications. (Russian) **(80j:10031)**
Perron, Bernard *See* **Lê Dũng Tráng, (80k:32009)**
Persson, Ulf Double coverings and surfaces of general type. **(80h:14017)**
Raymond, Frank *See* **Neumann, Walter D., (80e:57008)**
Taylor, Paul *See* **Fenn, Roger A., (80k:57010)**
Wagreich, Philip Automorphic forms and singularities of complex surfaces. **(80h:30046)**
Wall, C. T. C. *See* **Bruce, J. W., (80f:14021)**
Yau, Stephen Shing Toung On maximally elliptic singularities. **(80j:32021)**

14J20 Arithmetic ground fields [See also 10Bxx, 14Gxx.]

Secondary classifications:

van der Geer, G. Minimal models for Hilbert modular surfaces of principal congruence subgroups. **(80j:14031)**
Hirzebruch, F. (*with* Van de Ven, Antonius) Minimal Hilbert modular surfaces with $p_g = 3$ and $k^2 = 2$. **(80d:10040)**
Kudla, Stephen S. Intersection numbers for quotients of the complex 2-ball and Hilbert modular forms. **(80a:10044)**
Towber, Jacob Tangent bundles to affine quadric surfaces over local and global fields. **(80g:10022)**
Van de Ven, Antonius *See* **Hirzebruch, F., (80d:10040)**

14J25 Special surfaces

Bombieri, E. (*with* Catanese, F.) The tricanonical map of a surface with $K^2 = 2$, $p_g = 0$. **80j:14028**
Bruce, J. W. (*with* Wall, C. T. C.) On the classification of cubic surfaces. **80f:14021**
Catanese, F. *See* **Bombieri, E., 80j:14028**
Edge, W. L. The scroll of tangents of an elliptic quartic curve. **80h:14016**
Fujita, Takao On Zariski problem. **80j:14029**
van der Geer, G. Minimal models for Hilbert modular surfaces of principal congruence subgroups. **80j:14031**
Ignatenko, V. F. Conditions for the invariance of a cubic surface relative to the symmetry group of a regular tetrahedron. (Russian) **80k:14045**
Katsura, Toshiyuki Surfaces unirationnelles en caractéristique p. (English summary) **80e:14014**
See also **Shioda, Tetsuji, 80g:14033**
Miyanishi, Masayoshi Unirational quasi-elliptic surfaces. **80m:14022**
Simple birational extensions of a polynomial ring $k[x, y]$. **80k:14046**
Polynomial rings and related topics. (Japanese) **80m:14023**
Mumford, David An algebraic surface with K ample, $(K^2) = 9$, $p_g = q = 0$. **80j:14032**
Naruki, Isao Über die Kleinsche Ikosaeder-Kurve sechsten Grades. **80d:14021**
Nygaard, Niels O. A p-adic proof of the nonexistence of vector fields on $K3$ surfaces. **80m:14024**
Persson, Ulf Double coverings and surfaces of general type. **80h:14017**
Reid, Miles Surfaces with $p_g = 0$, $K^2 = 1$. **80h:14018**
Rudakov, A. N. (*with* Šafarevič, I. R.) Supersingular $K3$ surfaces over fields of characteristic 2. (Russian) **80e:14015**
(*with* Šafarevič, I. R.) Vector fields on elliptic surfaces. (Russian) **80f:14022**
Russell, Peter (*with* Sathaye, Avinash) On finding and cancelling variables in $k[X, Y, Z]$. **80j:14030**
Šafarevič, I. R. *See* **Rudakov, A. N., 80e:14015** *and* **Rudakov, A. N., 80f:14022**
Sathaye, Avinash *See* **Russell, Peter, 80j:14030**
Shioda, Tetsuji (*with* Katsura, Toshiyuki) On Fermat varieties. **80g:14033**
Simha, R. R. Algebraic varieties biholomorphic to $\mathbf{C}^* \times \mathbf{C}^*$. **80c:14024**
Van de Ven, Antonius Some recent results on surfaces of general type. **80h:14019**
Wall, C. T. C. *See* **Bruce, J. W., 80f:14021**

Secondary classifications:

Hirzebruch, F. (*with* Van de Ven, Antonius) Minimal Hilbert modular surfaces with $p_g = 3$ and $k^2 = 2$. **(80d:10040)**
Iitaka, Shigeru Geometry on complements of lines in P^2. **(80g:14015)**
Kudla, Stephen S. Intersection numbers for quotients of the complex 2-ball and Hilbert modular forms. **(80a:10044)**

Mandelbaum, Richard On the topology of elliptic surfaces. **(80j:57034)**
Nikulin, V. V. Integer symmetric bilinear forms and some of their geometric applications. (Russian) **(80j:10031)**
Papantonopoulou, Aigli Surfaces in the Grassmann variety $G(1, 3)$. **(80j:14045)**
Tong, Yue Lin Lawrence *Weighted intersection numbers on Hilbert modular surfaces.* **(80f:10034)**
Van de Ven, Antonius *See* **Hirzebruch, F., (80d:10040)**

14J30 Special 3-folds [See also 14E05.]

Bloch, S. (*with* Murre, J. P.) On the Chow group of certain types of Fano threefolds. **80m:14025**
Collino, Alberto A cheap proof of the irrationality of most cubic threefolds. (Italian summary) **80i:14011**
Mori, Shigefumi (*with* Sumihiro, Hideyasu) On Hartshorne's conjecture. **80j:14033**
Murre, J. P. *See* **Bloch, S., 80m:14025**
Šokurov, V. V. Smoothness of a general anticanonical divisor on a Fano variety. (Russian) **80h:14020**
Sumihiro, Hideyasu *See* **Mori, Shigefumi, 80j:14033**

Secondary classifications:

Collino, Alberto Lines on quartic threefolds. **(80j:14005)**
Iskovskih, V. A. Fano threefolds. II. (Russian) **(80c:14023b)**
Simis, Aron Rationality criteria for algebraic varieties of dimension ≤ 3. (Portuguese) **(80k:14055)**

14J35 Special 4-folds [See also 14E05.]

Collino, Alberto Grothendieck's K-theory and the cubic threefold with one ordinary double point. (Italian summary) **80i:14012**
Conte, A. (*with* Murre, J. P.) The Hodge conjecture for fourfolds admitting a covering by rational curves. **80a:14018**
Murre, J. P. *See* **Conte, A., 80a:14018**

14J40 Special n-folds

Secondary classifications:

Kifer, M. I. (*with* Skornjakov, I. A.) Hilbert-Kuga-Sato varieties and parabolic differentials. (Russian) **(80j:10036)**
Mabuchi, Toshiki Almost homogeneous torus actions of varieties with ample tangent bundle. **(80k:14050)**
Mori, Shigefumi (*with* Sumihiro, Hideyasu) On Hartshorne's conjecture. **(80j:14033)**
Skornjakov, I. A. *See* **Kifer, M. I., (80j:10036)**
Sumihiro, Hideyasu *See* **Mori, Shigefumi, (80j:14033)**
Szrek, Michał Kählerian deformations of some complex structures. (Russian summary) **(80g:32040)**

14J99 None of the above, but in this section

Bogomolov, F. A. Holomorphic symmetric tensors on projective surfaces. (Russian) **80c:14025**
Mumford, David Some footnotes to the work of C. P. Ramanujam. **80m:14026**
Timmermann, Horst Eine inzidenzgeometrische Definition der Mannigfaltigkeiten von Segre. **80h:14021**
Viro, O. Ja. Construction of M-surfaces. (Russian) **80j:14034**

Secondary classifications:

Mandelbaum, Richard On the topology of elliptic surfaces. **(80j:57034)**
Irrational connected sums and the topology of algebraic surfaces. **(80e:57023)**
Nygaard, Niels O. Closedness of regular 1-forms on algebraic surfaces. **(80j:14019)**

14Kxx Abelian varieties and schemes

14K05 Algebraic theory

Sekiguchi, Tsutomu On the cubics defining abelian varieties in every characteristic. **80g:14034**
On the cubics defining abelian varieties. **80i:14013**
On the normal generation by a line bundle on an Abelian variety. **80c:14026**

14K07 Elliptic curves, one-dimensional theory

Andrijčuk, V. I. Distinguishing the class of general local fields with residue characteristics $p < 3$, for which the Tate-Šafarevič pairing on elliptic curves is nondegenerate from the left. (Russian. English summary) **80e:14016**
(Goldfeld, D.) *See* **Mazur, B., 80h:14022**
Hubbard, John *See* **Pourezza, Ibrahim, 80h:14023**
Kenku, M. A. Certain torsion points on elliptic curves defined over quadratic fields. **80g:14035**
Kubert, Daniel Sion Universal bounds on the torsion of elliptic curves. **80i:14014**
Mazur, B. Rational isogenies of prime degree (with an appendix by D. Goldfeld). **80h:14022**
Pourezza, Ibrahim (*with* Hubbard, John) The space of closed subgroups of $\mathbf{R}^2$. **80h:14023**
Stroeker, R. J. Aspects of elliptic curves; an introduction. **80b:14019**
Yui, Noriko Elliptic curves and canonical subgroups of formal groups. **80c:14027**
Formal groups and some arithmetic properties of elliptic curves. **80m:14027**

Secondary classifications:

Baldisserri, Natalia On the number of points of elliptic cubics with complex multiplication, reduced modulo p. (Italian. English summary) **(80j:10025)**
Bertrand, Daniel *Une mesure de transcendance liée à la torsion des courbes elliptiques.* **(80m:10022)**
Fonctions modulaires, courbes de Tate et indépendance algébriques. **(80c:10035)**
Cassels, J. W. S. *A Diophantine equation over a function field.* **(80a:10030)**
Koizumi, Shoji The equations defining abelian varieties and modular functions. **(80i:14016)**
Kotov, S. V. Die arithmetische Struktur der rationalen Punkte auf Kurven vom Geschlecht Eins. **(80m:10013)**
(*with* Trelina, L. A.) S-ganze Punkte auf elliptischen Kurven. **(80b:10024)**
Laurent, Michel Transcendance de périodes d'intégrales elliptiques. (English summary) **(80d:10053)**
Nakata, Kumiko On some elliptic curves defined over Q of free rank > 9. **(80k:14037)**
Shih, Kuang-yen p-division points on certain elliptic curves. **(80d:10042)**
Snyder, Chip Partial fraction decompositions and Kummer congruences for the normalized coefficients of the Laurent expansion of elliptic functions parametrizing a nonsingular cubic curve in Hessian normal form. **(80d:10036)**
Stroeker, R. J. A class of Diophantine equations connected with certain elliptic curves over $\mathbf{Q}(\sqrt{-13})$. **(80e:10019)**
Toki, Keisuke Some remarks on invariants of abelian varieties concerning the reduction theory. **(80f:14023)**
Trelina, L. A. *See* **Kotov, S. V., (80b:10024)**
Vvedens'kiĭ, O. M. Computation of the Selmer group and order of divisibility of the elements ш in the groups $H^1(K, E; q)$ of an elliptic curve. (Russian. English summary) **(80e:14007)**
Pairings in elliptic curves over global fields. (Russian) **(80j:14037)**
Yui, Noriko Correction: "Explicit form of the modular equation" (J. Reine Angew. Math. 299/300 (1978), 185–200). **(80b:10032)**
Zimmer, Horst G. Quasifunctions on elliptic curves over local fields. **(80g:14024)**

14K10 Algebraic moduli, classification

Cfasman, M. A. Moduli of very special abelian varieties. (Russian) **80c:14028**
Koblitz, Neal (*with* Rohrlich, David) Simple factors in the Jacobian of a Fermat curve. **80d:14022**
Koizumi, Shoji On equations defining abelian varieties and modular functions. **80e:14017**
Rohrlich, David *See* **Koblitz, Neal, 80d:14022**

Secondary classifications:

Igusa, Jun-ichi On the ring of modular forms of degree two over Z. **(80d:10039)**
Norman, Peter Intersections of components of the moduli space of abelian varieties. **(80a:14019)**

14K15 Arithmetic ground fields [See also 10Bxx, 10Dxx, 14Gxx.]

Baĭmakov, M. I. (*with* Kuročkin, A. S.) Selmer groups of supersingular elliptic curves. (Russian) **80d:14023**
Harris, Michael p-adic representations arising from descent on abelian varieties. **80j:14035**
Systematic growth of Mordell-Weil groups of abelian varieties in towers of number fields. **80i:14015**
Koizumi, Shoji The equations defining abelian varieties and modular functions. **80i:14016**
Kuročkin, A. S. *See* **Baĭmakov, M. I., 80d:14023**
Nakamura, Tetsuo A note on endomorphism rings of abelian varieties over finite fields. **80g:14036**
Tankeev, S. G. Algebraic cycles on abelian varieties. (Russian) **80b:14020**
Tapia-Recillas, Horacio Subgroups of finite index of a class of abelian varieties. **80j:14036**
Toki, Keisuke Some remarks on invariants of abelian varieties concerning the reduction theory. **80f:14023**
Vvedens'kiĭ, O. M. Pairings in elliptic curves over global fields. (Russian) **80j:14037**
The frequency of the appearance of the Artin-Milne effect in elliptic curves. (Russian) **80g:14037**
Zarhin, Ju. G. Abelian varieties, l-adic representations and SL_2. (Russian) **80i:14017**

Secondary classifications:

Bertrand, Daniel Sur les périodes de formes modulaires. (English summary) **(80b:10048)**
Bosch, Siegfried Multiplikative Untergruppen in abeloiden Mannigfaltigkeiten. **(80d:14014)**
Flicker, Yuval Z. On analytic models of degenerating abelian varieties. (French summary) **(80m:10023)**
Hall, Rita On the cohomology of Kuga's fiber variety. **(80a:10041)**
Igusa, Jun-ichi On the ring of modular forms of degree two over Z. **(80d:10039)**
Kubert, Daniel Sion Universal bounds on the torsion of elliptic curves. **(80i:14014)**
Mori, Shigefumi The endomorphism rings of some abelian varieties. II. **(80e:14009)**
Vvedens'kiĭ, O. M. Computation of the Selmer group and order of divisibility of the elements ш in the groups $H^1(K, E; q)$ of an elliptic curve. (Russian. English summary) **(80e:14007)**

14K20 Analytic theory; abelian integrals and differentials

Secondary classifications:

Auslander, L. (*with* Tolimieri, R.) Algebraic structures for $\oplus\Sigma_{n>1}L^2(\mathbf{Z}/n)$ compatible with the finite Fourier transform. **(80b:22012)**

Matsushima, Yozo On the intermediate cohomology group of a holomorphic line bundle over a complex torus. **(80j:32046)**
Tolimieri, R. *See* **Auslander, L., (80b:22012)**

14K22 Complex multiplication [See also 10D25.]

Secondary classifications:

Baldassarri, Natalia On the number of points of elliptic cubics with complex multiplication, reduced modulo p. (Italian. English summary) **(80j:10025)**
Katz, Nicholas M. p-adic L-functions for CM fields. **(80b:10039)**
Kurčanov, P. F. The cohomology of discrete groups and Dirichlet series that are related to Jacquet-Langlands cusp forms. (Russian) **(80b:10038)**
Mauser, D. W. Polynomial interpolation in several complex variables. **(80d:10054)**

14K25 Theta functions

Glass, J. P. Theta constants of genus three. **80m:14028**

Secondary classifications:

Kato, Takao Conformal self-mappings of Riemann surfaces. (Japanese) **(80d:30043)**
Zăgănescu, M. Theta functions as solutions of the Schrödinger equation. (Romanian summary) **(80e:81038a)**

14K30 Picard schemes, higher Jacobians

Secondary classifications:

Bertrand, Daniel Sur les périodes de formes modulaires. (English summary) **(80b:10048)**
Griffiths, Phillip A. A theorem concerning the differential equations satisfied by normal functions associated to algebraic cycles. **(80k:14016)**
Matsushima, Yozo On the intermediate cohomology group of a holomorphic line bundle over a complex torus. **(80j:32046)**
Wright, David Lee The amalgamated free product structure of $GL_2(k[X_1, \cdots, X_n])$ and the weak Jacobian theorem for two variables. **(80a:20049)**

14K99 None of the above, but in this section

Secondary classifications:

Hulbregtse, Mark E. The Albanese mapping for a punctual Hilbert scheme. I. Irreducibility of the fibers. **(80g:14009)**

14Lxx Group schemes {For linear algebraic groups, see 20Gxx. For Lie algebras, see 17B45.}

14L05 Formal groups, p-divisible groups [See also 17B50.]

Hazewinkel, Michiel Norm maps for formal groups. IV. **80e:14018**
Constructing formal groups. VIII. Formal A-modules. **80k:14018**
Kirillov, A. N. Convex polytopes and formal groups. (Russian) **80j:14038**
Lubin, Jonathan Canonical subgroups of formal groups. **80j:14039**
Norman, Peter Intersections of components of the moduli space of abelian varieties. **80a:14019**
Rotman, Joseph J. Cartier duality and formal groups over Z. **80a:14020**
Yanagihara, Hiroshi On group-theoretic properties of cocommutative Hopf algebras. **80g:14038**
Yui, Noriko On the p-divisible groups arising from Fermat curves. **80k:14047**
A note on formal groups and zeta functions. **80c:14029**

Secondary classifications:

Buhštaber, V. M. Characteristic classes in cobordism and topological applications of the theory of single-valued and two-valued formal groups. (Russian) **(80g:55008)**
Cenki, Bohumil (*with* Porter, Richard) Complétion de Lazard des groupes par des formes différentielles. (English summary) **(80b:58004)**
Porter, Richard *See* **Cenki, Bohumil, (80b:58004)**
Takeuchi, Mitsuhiro Formal groups and Hopf algebras. (Japanese) **(80k:14048)**
Yanagihara, Hiroshi On isomorphism theorems of formal groups. **(80g:16011)**
Yui, Noriko Elliptic curves and canonical subgroups of formal groups. **(80c:14027)**
Formal groups and some arithmetic properties of elliptic curves. **(80m:14027)**

14L10 Group varieties

14L15 Group schemes

Magid, Andy R. Separately algebraic group laws. **80d:14024**
Merkur'ev, A. S. A seven-term sequence in the Galois theory of schemes. (Russian) **80j:14040**
Sullivan, John Brendan Relations between the cohomology of an algebraic group and its infinitesimal subgroups. **80a:14021**
Simply connected groups, the hyperalgebra, and Verma's conjecture. **80a:14022**
Representations of Witt groups. **80g:14039**
The representative functions on the hyperalgebra. **80m:14029**
Takeuchi, Mitsuhiro Formal groups and Hopf algebras. (Japanese) **80k:14048**
Weisfeiler, B. On abstract monomorphisms of k-forms of PGL(2). **80e:14019**

Secondary classifications:

Bogomolov, F. A. Holomorphic tensors and vector bundles on projective manifolds. (Russian) **(80j:14014)**
Čistov, A. L. The number of generators of the semigroup of stable equivalence classes of algebraic tori. (Russian) **(80b:14012)**
Radford, David E. A natural ring basis for the shuffle algebra and an application to group schemes. **(80k:16016)**
Simson, Daniel (*with* Skowroński, A.) On the category of commutative connected graded Hopf algebras over a perfect field. **(80a:16015)**
Skowroński, A. *See* **Simson, Daniel, (80a:16019)**

14L17 Affine algebraic groups, hyperalgebra constructions [See also 17B45, 18D35.]

Secondary classifications:

Kempf, George R. The Grothendieck-Cousin complex of an induced representation. **(80g:14042)**
Radford, David E. Embedding commutative irreducible Hopf algebras into cofree irreducible Hopf algebras. **(80m:16008)**

14L20 Finite group schemes

Frey, Gerhard Dualitätssatz für endliche kommutative Gruppenschemata über Kongruenzfunktionenkörpern. **80j:14041**

Secondary classifications:

Cfasman, M. A. Moduli of very special abelian varieties. (Russian) **(80c:14028)**

14L25 Pro-algebraic group schemes

Peterson, Brian Extensions of pro-affine algebraic groups. **80e:14020**
Radford, David E. When pro-affine monoid schemes are group schemes. **80d:14025**

14L30 Group actions on varieties or schemes [See also 14D25.]

Adler, Allan On the automorphism group of a certain cubic threefold. **80d:14026**
Ahiezer, D. N. Algebraic groups that are transitive in the complement to a homogeneous hypersurface. (Russian) **80m:14030**
Brylinski, Jean-Luc Décomposition simpliciale d'un réseau, invariante par un groupe fini d'automorphismes. (English summary) **80f:14024**
Duma, Ewa Decompositions of algebraic varieties given by actions of algebraic tori. (Russian summary) **80m:14031**
Humphreys, J. E. Hilbert's fourteenth problem. **80b:14021**
Luna, D. (*with* Richardson, R. W.) A generalization of the Chevalley restriction theorem. **80k:14049**
Mabuchi, Toshiki Almost homogeneous torus actions of varieties with ample tangent bundle. **80k:14050**
Neuman, Gerald Rational surfaces with too many vector fields. **80e:14021**
Richardson, R. W. *See* **Luna, D., 80k:14049**
Schwarz, Gerald W. Representations of simple Lie groups with regular rings of invariants. **80m:14032**

Secondary classifications:

Andersen, Henning Haahr The first cohomology group of a line bundle on G/B. **(80e:14025)**
Danilov, V. I. The geometry of toric varieties. (Russian) **(80g:14001)**
Hesselink, Wim The normality of closures of orbits in a Lie algebra. **(80g:14018)**
Hotta, R. (*with* Shimomura, N.) The fixed-point subvarieties of unipotent transformations on generalized flag varieties and the Green functions. Combinatorial and cohomological treatments centering GL_n. **(80h:20068)**
Kempf, George R. Instability in invariant theory. **(80c:20057)**
Kleiman, Steven L. *See* **Lønsted, Knud, (80g:14028)**
Koras, Mariusz On actions of an analytic torus. (Russian summary) **(80h:32055)**
Kraft, Hanspeter (*with* Procesi, Claudio) Closures of conjugacy classes of matrices are normal. **(80m:14037)**
Lønsted, Knud (*with* Kleiman, Steven L.) Basics on families of hyperelliptic curves. **(80g:14028)**
Naruki, Isao Über die Kleinsche Ikosaeder-Kurve sechsten Grades. **(80d:14021)**
Procesi, Claudio *See* **Kraft, Hanspeter, (80m:14037)**
Richardson, R. W. Commuting varieties of semisimple Lie algebras and algebraic groups. **(80c:17009)**
Sekiguchi, Jirō (*with* Yano, Tamaki) The algebra of invariants of the Weyl group $W(F_4)$. **(80k:32011)**
(*with* Yano, Tamaki) A note on the Coxeter group of type H_3. **(80k:32012)**
Shimomura, N. *See* **Hotta, R., (80h:20068)**
Stanley, Richard P. Combinatorics and invariant theory. **(80e:15020)**
Voskresenskiĭ, V. E. R-equivalence questions on semisimple groups. (Russian) **(80j:14021)**
Yano, Tamaki *See* **Sekiguchi, Jirō, (80k:32011)** *and* **Sekiguchi, Jirō, (80k:32012)**

14L35 Classical groups (geometric aspects)

Secondary classifications:

(Ackerman, Michael) *See* **Hilbert, David, (80e:01035)**
(Hermann, Robert) *See* **Hilbert, David, (80e:01035)**
Hilbert, David ★Hilbert's invariant theory papers. **(80e:01035)**

14L40 Other algebraic groups (geometric aspects)

14L99 None of the above, but in this section

Cassidy, Phyllis Joan Unipotent differential algebraic groups. **80m:14033**
Kraft, Hanspeter Bahnenräume bei linearen Darstellungen reduktiver Gruppen. **80a:14023**

Secondary classifications:

Kambayashi, T. (*with* Miyanishi, Masayoshi) On flat fibrations by the affine line. **(80f:14028)**
Miyanishi, Masayoshi *See* **Kambayashi, T., (80f:14028)**
Steinberg, Robert Conjugacy in semisimple algebraic groups. **(80f:20048)**
Yamazaki, Yasuko On the variety of Borel subgroups containing a given diagonalizable subset. **(80f:20049)**

14Mxx Special varieties

14M05 Varieties defined by ring conditions (factorial, Macaulay)

Faltings, Gerd Über Macaulayfizierung. **80c:14030**
Kempf, George R. The Hochster-Roberts theorem of invariant theory. **80g:14040**
Nakajima, Haruhisa Invariants of reflection groups in positive characteristics. **80f:14019**
Renschuch, Bodo Zur Abhängigkeit der Perfektheit von der Charakteristik. **80a:14024**
Sally, Judith D. Cohen-Macaulay local rings of maximal embedding dimension. **80c:14022**
Schenzel, Peter Dualizing complexes and systems of parameters. **80f:14025**
Stückrad, Jürgen (*with* Vogel, Wolfgang) On Segre products and applications. **80c:14031**
Tedeschi, Giulio Openness of loci for affine and projective spectra in a graded Noetherian domain. (Italian. English summary) **80m:14034**
Vogel, Wolfgang *See* **Stückrad, Jürgen, 80c:14031**

Secondary classifications:

Herrmann, M. (*with* Schmidt, Rolf) Remarks on generalized Cohen-Macaulay rings and singularities. **(80b:14002)**
Herzog, Jürgen Ein Cohen-Macaulay-Kriterium mit Anwendungen auf den Konormalenmodul und den Differentialmodul. **(80a:13025)**
Kind, Bernd (*with* Kleinschmidt, Peter) Schälbare Cohen-Macauley-Komplexe und ihre Parametrisierung. **(80k:13010)**
Kleinschmidt, Peter *See* **Kind, Bernd, (80k:13010)**
Marinari, Maria Grazia The Gorenstein locus of a ring. (Italian. English summary) **(80h:13024)**
Ngo Viet Trung *See* **Schenzel, Peter; et al., (80i:13008)**
Nguyễn Tự Cường *See* **Schenzel, Peter; et al., (80i:13008)**
Schenzel, Peter (*with* Ngo Viet Trung; Nguyễn Tự Cường) Verallgemeinerte Cohen-Macaulay-Moduln. **(80i:13008)**
Multiplizitäten in verallgemeinerten Cohen-Macaulay-Moduln. **(80m:13003)**
Schmidt, Rolf *See* **Herrmann, M., (80b:14002)**
Valla, Giuseppe On form rings which are Cohen-Macaulay. **(80h:13025)**

14M07 Low-codimension problems [See also 14Cxx.]

Prabhakar Rao, A. Liaison among curves in $\mathbf{P}^3$. **80e:14023**

14M10 Complete intersections

Bresinsky, Henrik Monomial Gorenstein curves in A^4 as set-theoretic complete intersections. **80k:14051**
Canonero, Gabriella Observations on certain algebraic curves belonging to a quadric cone. (Italian. English summary) **80h:14024**
Griffiths, Phillip A. (*with* Harris, Joseph) Two proofs of a theorem concerning algebraic space curves. **80d:14027**
Guidetti, Renato On the complete intersections of an algebraic variety with hypersurfaces of the ambient space. (Italian. English summary) **80e:14024**
Harris, Joseph *See* **Griffiths, Phillip A., 80d:14027**
Hartshorne, Robin Complete intersections in characteristic $p>0$. **80d:14028**
Hovanskiĭ, A. G. Newton polyhedra, and the genus of complete intersections. (Russian) **80b:14022**
Kunz, Ernst Über die Anzahl der Gleichungen, die zur Beschreibung einer algebraischen Varietät nötig sind. **80j:14042**
Picco Botta, Luciana (*with* Verra, Alessandro) Some duality properties for geometrically linked schemes. (Italian. English summary) **80f:14026**
Robbiano, Lorenzo An algebraic property of $\mathbf{P}^1\times\mathbf{P}^N$. **80f:14027**
Verdi, Luisella The normal rational curves as set-theoretic complete intersections. (Italian. English summary) **80k:14052**
Verra, Alessandro *See* **Picco Botta, Luciana, 80f:14026**
Waldi, Rolf Vollständige Durchschnitte in Cohen-Macaulay-Ringen. **80d:14029**
Wood, John W. Complete intersections as branched covers and the Kervaire invariant. **80h:14025**
Zeuge, Jörn Die Schmiegräume an die Veronesemannigfaltigkeiten. **80h:14026**

Secondary classifications:

Beltrametti, Mauro On the contact of hypersurfaces along reducible subvarieties. (Italian. English summary) **(80j:14006)**
Boratyński, M. A note on set-theoretic complete intersection ideals. **(80c:13006)**
Ciliberto, Ciro On the Euler-Poincaré characteristic of complete intersections in $\mathbf{C}P^r$, with an isolated singularity. (Italian. English summary) **(80f:57011)**
Fukuwa, Masami On the structures of integral semigroups. **(80c:14003)**
Kunz, Ernst The conormal module of an almost complete intersection. **(80c:13017)**
Lascoux, Alain Syzygies des variétés déterminantales. **(80j:14043)**
Querré, Julien Intersections d'anneaux intègres. II. **(80a:13021)**
Rees, Elmer (*with* Thomas, Emery) Complex cobordism and intersections of projective varieties. **(80e:57044)**
On submanifolds of projective space. **(80i:57022)**
Thomas, Emery *See* **Rees, Elmer, (80e:57044)**
Wood, John W. A connected sum decomposition for complete intersections. **(80g:57050)**

14M12 Determinantal varieties

Goto, Shiro On the Gorensteinness of determinantal loci. **80h:14027**
Józefiak, Tadeusz Ideals generated by minors of a symmetric matrix. **80g:14041**
Lascoux, Alain Syzygies des variétés déterminantales. **80j:14043**
Ngo Viet Trung On the symbolic powers of determinantal ideals. **80k:14053**
Skopec, Z. A. (*with* Tihomirov, A. S.) Mapping of some systems of quadratic manifolds of the space P_3 into the space P_9. (Russian) **80k:14054**
Tihomirov, A. S. *See* **Skopec, Z. A., 80k:14054**

Secondary classifications:

Bărcănescu, Şerban (*with* Manolache, Nicolae) Nombres de Betti d'une singularité de Segre-Veronese. (English summary) **(80g:14003)**
Manolache, Nicolae *See* **Bărcănescu, Şerban, (80g:14003)**
Procesi, Claudio Positive symmetric functions. **(80d:15034)**

14M15 Grassmannians, Schubert varieties [See also 51M35.]

Andersen, Henning Haahr Cohomology of line bundles on G/B. **80j:14044**
The first cohomology group of a line bundle on G/B. **80e:14025**
Canuto, Giuseppe Associated curves and Plücker formulas in Grassmannians. **80m:14035**
de Concini, Corrado Symplectic standard tableaux. **80m:14036**
Contou-Carrère, Carlos E. Immeuble de Tits d'un groupe réductif et construction d'une famille de modèles birationnels lisses pour les adhérences des cellules de Schubert généralisées. (English summary) **80c:14032**
Kempf, George R. The Grothendieck-Cousin complex of an induced representation. **80g:14042**
Lancaster, Glenn (*with* Towber, Jacob) Representation-functors and flag-algebras for the classical groups. I. **80i:14029**
Papantonopoulou, Algli Non-proper intersection of surfaces and applications. **80c:14033**
Surfaces in the Grassmann variety $G(1,3)$. **80j:14045**
Singh, Kuldip Equivalence classes of the 3rd Grassmann space over a 5-dimensional vector space. **80j:14046**
Towber, Jacob *See* **Lancaster, Glenn, 80i:14029**

Secondary classifications:

Haboush, W. J. Homogeneous vector bundles and reductive subgroups of reductive algebraic groups. **(80f:14007)**
Hotta, R. (*with* Shimomura, N.) The fixed-point subvarieties of unipotent transformations on generalized flag varieties and the Green functions. Combinatorial and cohomological treatments centering GL_n. **(80h:20068)**
Kimel'fel'd, B. N. Reductive subgroups of orthogonal groups that are locally transitive on flag manifolds. (Russian. Georgian and English summaries) **(80g:53038)**
Loos, Ottmar Homogeneous algebraic varieties defined by Jordan pairs. **(80i:17022)**
Procesi, Claudio Les bases de Hodge dans la théorie des invariants. (English summary) **(80h:15020)**
Positive symmetric functions. **(80d:15034)**
Shimomura, N. *See* **Hotta, R., (80h:20068)**
Stanley, Richard P. Combinatorics and invariant theory. **(80e:15020)**
Sugawara, Tamio Nonimmersion and nonembedding theorems for complex Grassmann manifolds. **(80j:57027)**

14M17 Homogeneous spaces [See also 32M10, 53C30, 57T15.]

14M20 Rational varieties

Alperin, Roger Homology of the group of automorphisms of $k[x,y]$. **80j:14047**
Kambayashi, T. (*with* Miyanishi, Masayoshi) On flat fibrations by the affine line. **80f:14028**
On one-parameter family of affine planes. **80j:14048**
Miyanishi, Masayoshi *See* **Kambayashi, T., 80f:14028**
Russell, Peter Simple Galois extensions of two-dimensional affine rational domains. **80j:14049**
Simis, Aron Rationality criteria for algebraic varieties of dimension ≤ 3. (Portuguese) **80k:14055**

Secondary classifications:

Formanek, Edward The center of the ring of 3×3 generic matrices. **(80k:16019)**
(Geller, Susan C.) *See* **Roberts, Leslie G., (80k:13005)**
Guseĭ, N. P. (*with* Tihomirov, A. S.) Algebraic two-dimensional systems of a plane in P_4 and their application in the theory of mappings. (Russian) **(80k:51024)**
Iskovskih, V. A. Fano threefolds. I. (Russian) **(80c:14023a)**
Fano threefolds. II. (Russian) **(80c:14023b)**
Minimal models of rational surfaces over arbitrary fields. (Russian) **(80m:14021)**
Miyanishi, Masayoshi Simple birational extensions of a polynomial ring $k[x,y]$. **(80k:14046)**
Nakai, Yoshikazu On locally finite iterative higher derivations. **(80h:13006)**
Roberts, Leslie G. K_2 of some truncated polynomial rings. **(80k:13005)**
Tihomirov, A. S. *See* **Guseĭ, N. P., (80k:51024)**
Timmermann, Horst Eine inzidenzgeometrische Definition der Mannigfaltigkeiten von Segre. **(80h:14021)**

14M99 None of the above, but in this section

Kraft, Hanspeter (*with* Procesi, Claudio) Closures of conjugacy classes of matrices are normal. **80m:14037**
Procesi, Claudio *See* **Kraft, Hanspeter, 80m:14037**

Secondary classifications:

Barth, Wolf (*with* Van de Ven, Antonius) Fano varieties of lines on hypersurfaces. **(80j:14004)**
Danilov, V. I. Newton polyhedra and vanishing cohomology. (Russian) **(80k:14001)**
Kempf, George R. Instability in invariant theory. **(80c:20057)**
Kind, Bernd (*with* Kleinschmidt, Peter) Schälbare Cohen-Macauley-Komplexe und ihre Parametrisierung. **(80k:13010)**
Kleinschmidt, Peter *See* **Kind, Bernd, (80k:13010)**
Loos, Ottmar Homogeneous algebraic varieties defined by Jordan pairs. **(80l:17022)**
Teissier, Bernard Du théorème de l'index de Hodge aux inégalités isopérimétriques. (English summary) **(80k:14014)**
Van de Ven, Antonius *See* **Barth, Wolf, (80j:14004)**

14Nxx Classical methods and problems [See also 51–XX.]

14N05 Projective techniques

Secondary classifications:

Griffiths, Phillip A. (*with* Harris, Joseph) On Cayley's explicit solution to Poncelet's porism. **(80g:51017)**
Harris, Joseph *See* **Griffiths, Phillip A., (80g:51017)**
Iskovskih, V. A. Fano threefolds. I. (Russian) **(80c:14023a)**
Fano threefolds. II. (Russian) **(80c:14023b)**
Vainsencher, Israel The degrees of certain strata of the dual variety. (Portuguese) **(80g:14010)**

14N10 Enumerative problems

Catanese, F. On Severi's proof of the double point formula. **80f:14029**
Garsia, Adriano M. Méthodes combinatoires dans la théorie des anneaux de Cohen-Macaulay. (English summary) **80b:14023**
Grayson, Daniel R. Coincidence formulas in enumerative geometry. **80k:14056**
Harris, Joseph Galois groups of enumerative problems. **80m:14038**
Holme, Audun Deformation and stratification of secant structure. **80e:14026**
Le Barz, Patrick Géométrie énumérative pour les multisécantes. **80m:14039**
Mandan, Sahib Ram From [3] to [9]. **80h:14028**
Piccolella, Lia Fioravanti Algebraic surfaces with multiple lines. (Italian) **80j:14050**
Piene, Ragni Polar classes of singular varieties. **80j:14051**
Rollero, Aldo Elementary considerations on plane algebraic curves. (Italian. English and French summaries) **80e:14027**
Vainsencher, Israel Conics in characteristic 2. **80d:14030**

Secondary classifications:

(Ackerman, Michael) *See* **Hilbert, David, (80e:01035)**
Canuto, Giuseppe Associated curves and Plücker formulas in Grassmannians. **(80m:14035)**
Fulton, William (*with* MacPherson, Robert) Defining algebraic intersections. **(80g:14011)**
(Hermann, Robert) *See* **Hilbert, David, (80e:01035)**
Hilbert, David ★Hilbert's invariant theory papers. **(80e:01035)**
MacPherson, Robert *See* **Fulton, William, (80g:14011)**
Stagnaro, Ezio On the maximum number of isolated double points of an algebraic surface of P^3. (Italian. English summary) **(80l:14010)**
Wall, C. T. C. Note on the invariant of plane cubics. **(80g:14031)**
Whiteley, Walter Logic and invariant theory. IV. Invariants and syzygies in combinatorial geometry. **(80g:05023)**

14N99 None of the above, but in this section

Secondary classifications:

(Ackerman, Michael) *See* **Hilbert, David, (80e:01035)**
(Hermann, Robert) *See* **Hilbert, David, (80e:01035)**
Hilbert, David ★Hilbert's invariant theory papers. **(80e:01035)**
Humphreys, J. E. Hilbert's fourteenth problem. **(80b:14021)**

15–XX LINEAR AND MULTILINEAR ALGEBRA; MATRIX THEORY (finite and infinite)

15–01 Elementary exposition, textbooks

Casanova, Gaston ★Espaces euclidiens et hermitiens. **80f:15001**
Dietrich, Günter (*with* Stahl, Henry) ★Matrizen und Determinanten und ihre Anwendung in Technik und Ökonomie. **80d:15001**
Fischer, Gerd ★Lineare Algebra. **80k:15001**
Friedberg, Stephen H. (*with* Insel, Arnold J.; Spence, Lawrence E.) ★Linear algebra. **80f:15001**
Goult, R. J. ★Applied linear algebra. **80b:15001**
Graham, Alexander ★Matrix theory and applications for engineers and mathematicians. **80m:15001**
Insel, Arnold J. *See* **Friedberg, Stephen H.; et al., 80f:15001**
(Jankovskiĭ, G.) *See* **Proskurjakov, I. V., 80b:15002**
Nomizu, Katsumi ★Fundamentals of linear algebra. **80e:15001**
Onišĉik, A. L. ★Элементы линейной алгебры и теория групп. (Russian) [Elements of linear algebra and group theory] **80l:15002**
Proskurjakov, I. V. ★Problems in linear algebra. **80b:15002**
(Schimpl, Richard) *See* **Fischer, Gerd, 80k:15001**
Spence, Lawrence E. *See* **Friedberg, Stephen H.; et al., 80f:15001**
Stahl, Henry *See* **Dietrich, Günter, 80d:15001**

Secondary classifications:

Corwin, Lawrence J. (*with* Szczarba, Robert H.) ★Calculus in vector spaces. **(80f:26001)**
Fischer, Gerd ★Analytische Geometrie. **(80a:51001)**
Kalotas, T. M. (*with* Lee, A. R.) On the general form of Lorentz transformations. **(80c:83001)**
Komorowski, Jacek ★Od liczb zespolonych do tensorów, spinorów, algebr Liego i kwadryk. (Polish) [From complex numbers to tensors, spinors, Lie algebras and quadrics] **(80e:00002)**
Lamprecht, Erich ★Einführung in die Algebra. **(80e:00001)**
Lee, A. R. *See* **Kalotas, T. M., (80c:83001)**
(Maurin, Krzysztof) *See* **Komorowski, Jacek, (80e:00002)**
Szczarba, Robert H. *See* **Corwin, Lawrence J., (80f:26001)**

15–02 Advanced exposition (research surveys, monographs, etc.)

(Demuškin, S. P.) *See* **Lancaster, P., 80a:15001**
Lancaster, P. ★Теория матриц. (Russian) [Theory of matrices] **80a:15001**

Secondary classifications:

Wales, David B. Connections between finite linear groups and linear algebra. **(80g:20002)**

15–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Hawkins, Thomas Weierstrass and the theory of matrices. **(80m:01027)**
(Peirce, Benjamin) *See* **Pycior, Helena M., (80j:01022)**
Price, G. Baley Determinants with dominant principal diagonal: a personal historical note. **(80c:01018a)**
See also **Taussky, Olga, (80c:01018b)**
Pycior, Helena M. Benjamin Peirce's *Linear associative algebra*. **(80j:01022)**
Taussky, Olga Some comments concerning G. B. Price's note on: "Determinants with dominant principal diagonal: a personal historical note" (Linear and Multinear Algebra **6** (1978/79), no. 4, 247–250). **(80c:01018b)**
Uhlig, Frank A recurring theorem about pairs of quadratic forms and extensions: a survey. **(80h:15015)**
(Weierstrass, Karl) *See* **Hawkins, Thomas, (80m:01027)**
Zielke, Gerhard Zur historischen Entwicklung von verallgemeinerten inversen Matrizen. **(80m:01032)**

15–04 Explicit machine computation and programs (not the theory of computation or programming)

van der Meulen, S. G. (*with* Veldhorst, M.) ★TORRIX. A programming system for operations on vectors and matrices over arbitrary fields and of variable size. Vol. I. **80b:15003**
Veldhorst, M. *See* **van der Meulen, S. G., 80b:15003**

15–06 Proceedings, conferences, etc.

15A03 Vector spaces, linear dependence, rank

Agrawala, Vishnu K. (*with* Chao, Chong Yun) Equalities and inequalities for ranks of modules. **80g:15001**
Barker, George Phillip Faces and duality in convex cones. **80b:15004**
Chao, Chong Yun *See* **Agrawala, Vishnu K., 80g:15001**
Guralnick, Robert M. A note on pairs of matrices with rank one commutator. **80k:15002**
Kim, Ki Hang (*with* Roush, Fred W.) Reflexive lattices of subspaces. **80h:15001**
Kirsch, Arnold Beziehungen zwischen der Additivität und der Homogenität von Vektorraum-Abbildungen. **80b:15005**
Kossow, Andreas Basen in einer speziellen Alegbra über einem endlichen Vektorraum. **80f:15002**
Roush, Fred W. *See* **Kim, Ki Hang, 80h:15001**
Selmi, Giovanni Necessary and sufficient conditions for the existence of subspaces invariant for A^h but not for A. (Italian) **80a:15002**
Zellini, Paolo On the optimal computation of a set of symmetric and persymmetric bilinear forms. **80g:15002**

Secondary classifications:

Cline, R. E. (*with* Funderlic, R. E.) The rank of a difference of matrices and associated generalized inverses. **(80f:15004)**
Diab, Vlastimil (*with* Ringel, Claus Michael) Real subspaces of a quaternion vector space. **(80a:15033)**
Fiedler, Miroslav Minimal sets of vectors which generate $\mathbf{R}^n$ with excess k. **(80e:52003)**
Funderlic, R. E. *See* **Cline, R. E., (80f:15004)**
Grigor'ev, D. Ju. On the rank of pairs of matrices and convolutions. (Russian) **(80h:15017)**

Muciek, Andrzej Algebraic model of dimensional analysis. (Russian summary) **(80f:93001)**
Ringel, Claus Michael *See* **Dlab, Vlastimil, (80a:15033)**
Salazar, Tomas Eufracio An abstract matrix model: the column model. **(80k:15029)**

15A04 Linear transformations, semilinear transformations

Beasley, Leroy B. Linear transformations on matrices: the invariance of commuting pairs of matrices. **80a:15003**
Dašić, Vučić Some unary operations with matrices and the near-ring of affine transformations. (Serbo-Croatian. English summary) **80k:15003**
Lim, M. H. Linear transformations on symmetric matrices. **80f:15003**
Young, N. J. Linear fractional transforms of companion matrices. **80j:15001**

Secondary classifications:

Babaev, È. A. Semiheaps of homomorphisms of linear spaces. (Russian. Azerbaijani and English summaries) **(80b:15020)**
Bhagwat, K. V. *See* **Subramanian, R., (80k:15030)**
Clausen, H. L. The multiplications in $GF(q)[x]/(a(x))$ considered as linear transformations. **(80c:12025)**
Kim, Ki Hang (*with* Roush, Fred W.) Reflexive lattices of subspaces. **(80h:15001)**
Lahiri, B. K. On the space of certain functions. **(80h:46053)**
Longstaff, W. E. On the operation Alg Lat in finite dimensions. **(80g:47045)**
Ong, Hock Linear transformations on matrices: the invariance of generalised permutation matrices. II. **(80h:15018)**
Roush, Fred W. *See* **Kim, Ki Hang, (80h:15001)**
Subramanian, R. (*with* Bhagwat, K. V.) On a theorem of Wigner on products of positive matrices. **(80k:15030)**

15A06 Linear equations

Kabe, D. G. Solutions of systems of linear symmetric matrix equations. **80g:15003**
Kolupa, Michał Construction of an interval which contains all components of the solution vector of an inhomogeneous Cramer system of linear equations. (Polish. Russian and English summaries) **80e:15002**
Majcher, G. (*with* Styrylska, T.) Multistage equalization of direct conditioned observations. (Polish) **80d:15002**
Styrylska, T. *See* **Majcher, G., 80d:15002**
Yoshikawa, Tsuneo Condition for existence of solutions of linear equations with arbitrary vectors and its relations to controllability. (Japanese) **80k:15004**

Secondary classifications:

Abdelmalek, Nabih N. Solutions of minimum time problem and minimum fuel problem for discrete linear admissible control systems. **(80b:93062)**
Hodges, John H. Note on a linear matrix equation over a finite field. (Italian summary) **(80k:15021)**
Papernov, E. L. Solution of infinite systems of linear algebraic equations. (Russian) **(80a:65120)**
Semencov, O. V. Linear equations over lattice-ordered rings. (Russian) **(80g:06022)**
Zlatarov, D. P. Partially regulated solutions of overdetermined systems of linear equations used in geophysics. **(80g:65044)**

15A09 Matrix inversion, generalized inverses

Barker, George Phillip *See* **Poole, G. D., 80e:15004**
Barnett, Stephen *See* **Roebuck, Pamela A., 80a:15005**
Barrett, Wayne W. A theorem on inverses of tridiagonal matrices. **80i:15003**
Batigne, Daniel R. Integral generalized inverses of integral matrices. **80c:15001**
Berg, Lothar Asymptotic evaluation of the Moore-Penrose inverses of rectangular band matrices. **80k:15005**
Campbell, Stephen L. (*with* Meyer, C. D., Jr.) ★Generalized inverses of linear transformations. **80d:15003**
Cline, R. E. (*with* Funderlic, R. E.) The rank of a difference of matrices and associated generalized inverses. **80f:15004**
Dekker, H. On the concept of separable infinite matrices. **80g:15004**
Dragomir, P. On the quasi-unitary matrices. **80f:15005**
Flores De Chela, Delia Generalized inverses on normed vector spaces. **80e:15003**
Foata, Dominique A noncommutative version of the matrix inversion formula. **80f:15006**
Friedlander, B. (*with* Morf, Martin; Kailath, Thomas; Ljung, Lennart) New inversion formulas for matrices classified in terms of their distance from Toeplitz matrices. **80k:15006**
Fulton, John D. Generalized inverses of matrices over a finite field. **80c:15002**
Generalized inverses of matrices over fields of characteristic two. **80i:15004**
Funderlic, R. E. *See* **Cline, R. E., 80f:15004**
Gilbert, J. D. *See* **Wibker, E. A.; et al., 80f:15009**
Glencross, M. J. (*with* Wong, Edward T.; Planitz, M.) Three slants on the generalised inverse. **80j:15002**
Goel, V. K. *See* **Jain, S. K.; et al., 80f:15007; Jain, S. K.; et al., 80k:15008** *and* **Jain, S. K.; et al., 80m:15002**
Greville, T. N. E. On a problem concerning band matrices with Toeplitz inverses. **80h:15002**
Hall, Frank J. (*with* Hartwig, Robert E.; Katz, Irving J.) A note on pseudosimilarity of matrices. **80g:15005**
The Moore-Penrose inverse of particular bordered matrices. **80j:15003**
(*with* Katz, Irving J.) On ranks of integral generalized inverses of integral matrices. **80d:15004**
Hartwig, Robert E. Schur's theorem and the Drazin inverse. **80a:15004**
See also **Hall, Frank J.; et al., 80g:15005**
Haynsworth, Emilie (*with* Wall, J. R.) Group inverses of certain nonnegative matrices. **80b:15006**
Howe, R. B. *See* **Wibker, E. A.; et al., 80f:15009**
Ikebe, Yasuhiko On inverses of Hessenberg matrices. **80c:15003a**
See also **Yamamoto, Tetsuro, 80c:15003b**
Ishibashi, Makoto Cancellation of similarity for systems of matrices. **80k:15007**
Jain, S. K. (*with* Goel, V. K.; Kwak, Edward K.) Nonnegative mth roots of nonnegative 0-symmetric idempotent matrices. **80m:15002**
(*with* Goel, V. K.; Kwak, Edward K.) Nonnegative matrices having same nonnegative Moore-Penrose and group inverses. **80f:15007**
(*with* Kwak, Edward K.; Goel, V. K.) Decomposition of nonnegative group-monotone matrices. **80k:15008**
Kailath, Thomas (*with* Kung, Sun Yuan; Morf, Martin) Displacement ranks of a matrix. **80f:15008**
See also **Friedlander, B.; et al., 80k:15006**
Katz, Irving J. *See* **Hall, Frank J., 80d:15004** *and* **Hall, Frank J.; et al., 80g:15005**
Kim, Ki Hang (*with* Roush, Fred W.) Inverses of Boolean matrices. **80h:15007**
Kung, Sun Yuan *See* **Kailath, Thomas; et al., 80f:15008**
Kwak, Edward K. *See* **Jain, S. K.; et al., 80f:15007; Jain, S. K.; et al., 80k:15008** *and* **Jain, S. K.; et al., 80m:15002**
Ljung, Lennart *See* **Friedlander, B.; et al., 80k:15006**
Meyer, C. D., Jr. (*with* Stadelmaier, M. W.) Singular M-matrices and inverse positivity. **80b:15008**
See also **Campbell, Stephen L., 80d:15003**
Mitra, Sujit Kumar (*with* Puri, Madan L.) Shorted operators and generalized inverses of matrices. **80b:15009**
Morf, Martin *See* **Kailath, Thomas; et al., 80f:15008** *and* **Friedlander, B.; et al., 80k:15006**
Neumann, Michael A note on generalizations of strict diagonal dominance for real matrices. **80d:15005**
Planitz, M. *See* **Glencross, M. J.; et al., 80j:15002**
Poole, G. D. (*with* Barker, George Phillip) MP matrices. **80e:15004**
Puri, Madan L. *See* **Mitra, Sujit Kumar, 80b:15009**
Rack, H.-J. The explicit inverse of a quasi-tridiagonal matrix. **80b:15010a**
The explicit inverse of a quasi-tridiagonal matrix. **80b:15010b**
Reckziegel, Ingeborg (*with* Tasche, Manfred) Eine verallgemeinerte Inverse eines Matrizenpolynoms. **80k:15009**
Roebuck, Pamela A. (*with* Barnett, Stephen) A survey of Toeplitz and related matrices. **80a:15005**
Rothblum, Uriel G. An index classification of M-matrices. **80d:15006**
Roush, Fred W. *See* **Kim, Ki Hang, 80h:15007**
Searle, S. R. On inverting circulant matrices. **80e:15005**
Sen, S. K. (*with* Shamim, A. A.) Integral solution of linear equations using integer arithmetic. **80a:15006**
Shamim, A. A. *See* **Sen, S. K., 80a:15006**
Shinozaki, Nobuo (*with* Sibuya, Masaaki) Further results on the reverse-order law. **80j:15004**
Sibuya, Masaaki *See* **Shinozaki, Nobuo, 80j:15004**
Smith, Ronald L. The Moore-Penrose inverse of a retrocirculant. **80b:15011**
Spindelböck, Klaus Die M-P-Inverse des Produktes zweier in Jordanscher Normalform gegebener Matrizen. **80h:15003**
Stadelmaier, M. W. *See* **Meyer, C. D., Jr., 80b:15008**
Tasche, Manfred *See* **Reckziegel, Ingeborg, 80k:15009**
Wall, J. R. *See* **Haynsworth, Emilie, 80b:15006**
Wibker, E. A. (*with* Howe, R. B.; Gilbert, J. D.) Explicit solutions to the reverse order law $(AB)^+ = B_m^- A_l^-$. **80f:15009**
Wong, Edward T. *See* **Glencross, M. J.; et al., 80j:15002**
Yamamoto, Tetsuro (*with* Ikebe, Yasuhiko) Inversion of band matrices. **80c:15003b**

Secondary classifications:

Baksalary, Jerzy K. (*with* Kala, Radosław) The matrix equation $AX - YB = C$. **(80d:15014)**
Balins'kiĭ, A. Ì. (*with* Li-Gjun-Y) Inversion of Hankel and Toeplitz matrices. (Russian) **(80i:15016)**
Barnett, Stephen *See* **Maroulas, John, (80j:93097)**
Batigne, Daniel R. (*with* Hall, Frank J.; Katz, Irving J.) Further results on integral generalized inverses of integral matrices. **(80d:15020)**
Campbell, Stephen L. Nonregular singular dynamic Leontief systems. **(80j:90044)**
Conrad, V. (*with* Wallach, Y.) Alternating methods for sets of linear equations. **(80b:65042)**
Greville, T. N. E. (*with* Trench, W. F.) Band matrices with Toeplitz inverses. **(80d:15025)**
Hall, Frank J. *See* **Batigne, Daniel R.; et al., (80d:15020)**
Handelman, David (*with* Raphael, R.) Regular Schur rings. **(80b:16010)**
Hartwig, Robert E. (*with* Shoaf, Jim) On the derivative of the Drazin inverse of a complex matrix. **(80b:65050)**
Hoskins, W. D. (*with* Walton, D. J.) Methods for solving the matrix equation $TB + CT = -A$ and its generalizations. **(80b:65044)**
Kala, Radosław *See* **Baksalary, Jerzy K., (80d:15014)**
Kátai, Imre (*with* Rahmy, E.) Inversion of block Toeplitz and Hankel matrices. **(80m:65020)**
Katz, Irving J. *See* **Batigne, Daniel R.; et al., (80d:15020)**
Li-Gjun-Y *See* **Balins'kiĭ, A. Ì., (80i:15016)**
Lovass-Nagy, Victor (*with* Miller, Richard J.; Powers, David L.) An introduction to the application of the simplest matrix-generalized inverse in systems science. **(80b:93056)**
Maroulas, John (*with* Barnett, Stephen) Properties of Hermite's matrices in stability theory. **(80j:93097)**
Miller, Richard J. *See* **Lovass-Nagy, Victor; et al., (80b:93056)**
Phadke, S. V. (*with* Thakare, Nimbakrishna) Generalized inverses and operator equations. **(80b:47017)**

Powers, David L. *See* **Lovass-Nagy, Victor; et al., (80b:93056)**
Rahmy, E. *See* **Kótai, Imre, (80m:65020)**
Raphael, R. *See* **Handelman, David, (80b:16010)**
Romanovs'kiĭ, O. O. A method for the inversion of a high order polynomial matrix. (Russian. English summary) **(80g:65046)**
Sheaf, Jim *See* **Hartwig, Robert E., (80b:65050)**
Smith, Ronald L. Factorization of symmetric singular M-matrices. **(80c:15009)**
Thakare, Nimbakrishna *See* **Phadke, S. V., (80b:47017)**
Trench, W. F. *See* **Greville, T. N. E., (80d:15025)**
Wall, J. R. Rank factorizations of positive operators. **(80k:15031)**
Wallach, Y. *See* **Conrad, V., (80b:65042)**
Walton, D. J. *See* **Hoskins, W. D., (80b:65044)**
Zielinski, Adam On inversion of complex matrices. **(80g:65031)**

15A12 Conditioning of matrices [See also 65F35.]

Secondary classifications:

Veselić, Krešimir On a new class of elementary matrices. **(80m:65033)**

15A15 Determinants, permanents, other special matrix functions

Anderson, T. W. (*with* Olkin, Ingram) An extremal problem for positive definite matrices. **80a:15007**
Arczyński, Mirosław (*with* Borowiecki, Mieczysław; Syslo, Maciej M.) On Hallian digraphs, permanents and transversals. **80k:15010**
Baxter, David K. The existence of matrices with prescribed characteristic and permanental polynomials. **80a:15008**
Borowiecki, Mieczysław *See* **Arczyński, Mirosław; et al., 80k:15010**
Brenner, J. L. (*with* Wang, Edward T. H.) Permanental pairs of doubly stochastic matrices. II. **80k:15011**
Drucker, Daniel S. (*with* Goldschmidt, David M.) Graphical evaluation of sparse determinants. **80g:15006**
Foregger, Thomas H. A note on matrices with constant permanental minors. **80d:15007**
Friedland, Shmuel (*with* Minc, Henryk) Monotonicity of permanents of doubly stochastic matrices. **80b:15013**
Gessel, Ira Tournaments and Vandermonde's determinant. **80m:15003**
Goldschmidt, David M. *See* **Drucker, Daniel S., 80g:15006**
Gondran, M. (*with* Minoux, M.) L'indépendance linéaire dans les dioïdes. **80d:15008**
Grigor'ev, D. Ju. The relation between the rank and the multiplicative complexity of a bilinear form over a Noetherian commutative ring. (Russian) **80f:15010**
Gyires, B. On permanent inequalities. **80g:15007**
Jakovlev, O. S. The generalization of determinant identities. (Russian) **80b:15014**
Kim, Ki Hang (*with* Roush, Fred W.) On a conjecture of Erdős and Rényi. **80b:15012**
Lim, M. H. A note on the relation between the determinant and the permanent. **80g:15008**
(Marcus, Marvin) *See* **Minc, Henryk, 80d:15009**
Marimont, Rosalind B. Connectivity, combinatorics, and a continuant. **80b:15015**
Merris, Russell Generalized matrix functions: a research problem. **80j:15005**
Minc, Henryk ★Permanents. **80d:15009**
On a conjecture of R. F. Scott (1881). **80i:15005**
Evaluation of permanents. **80i:15006**
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Minoux, M. *See* **Gondran, M., 80d:15008**
Moler, Cleve B. (*with* Van Loan, Charles) Nineteen dubious ways to compute the exponential of a matrix. **80c:15004**
Nemeth, Evi (*with* Seberry, Jennifer; Shu, Michael) On the distribution of the permanent of cyclic (0, 1) matrices. **80m:15004**
Olkin, Ingram *See* **Anderson, T. W., 80a:15007**
Pierce, Stephen Discriminant preserving linear maps. **80k:15012**
Roush, Fred W. *See* **Kim, Ki Hang, 80b:15012**
Seberry, Jennifer *See* **Nemeth, Evi; et al., 80m:15004**
Shu, Michael *See* **Nemeth, Evi; et al., 80m:15004**
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Van Loan, Charles *See* **Moler, Cleve B., 80c:15004**
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See also **Brenner, J. L., 80k:15011**

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Bergum, Gerald E. (*with* Hoggatt, Verner E., Jr.) A family of tridiagonal matrices. **(80m:10013)**
Datta, Biswa Nath Two inertia theorems for Hessenberg matrices and their applications to stability analysis of linear control systems. **(80e:93094a)**
Two inertia theorems for Hessenberg matrices and their applications to stability analysis of linear control systems. **(80e:93094b)**
Foregger, Thomas H. Remarks on a conjecture of M. Marcus and H. Minc. **(80f:15025)**
Frost, M. G. (*with* Storey, Colin) Equivalence of a matrix over $\mathfrak{R}[s, z]$ with its Smith form. **(80a:93052)**
Hoggatt, Verner E., Jr. *See* **Bergum, Gerald E., (80a:10013)**
Kailath, Thomas (*with* Kung, Sun Yuan; Morf, Martin) Displacement ranks of a matrix. **(80f:15008)**
Kim, Jin Bai On circulant fuzzy matrices. **(80b:20092)**
Kung, Joseph P. S. Bimatroids and invariants. **(80c:05057)**
Kung, Sun Yuan *See* **Kailath, Thomas; et al., (80f:15008)**
McDaniel, Willie L., Jr. *See* **Mitchell, Jerrel R.; et al., (80b:93005)**
Mitchell, Jerrel R. (*with* Nail, James B.; McDaniel, Willie L., Jr.) Computation of cofactors of $[sI - A]$ with applications. **(80b:93005)**
Morf, Martin *See* **Kailath, Thomas; et al., (80f:15008)**
Nail, James B. *See* **Mitchell, Jerrel R.; et al., (80b:93005)**
Olkin, Ingram Matrix extensions of Liouville-Dirichlet-type integrals. **(80i:26015)**
Pouzet, Maurice Quelques remarques sur les résultats de Tutte concernant le problème de Ulam. **(80e:05084)**
Price, G. Baley Determinants with dominant principal diagonal: a personal historical note. **(80c:01018a)**
See also **Taussky, Olga, (80c:01018b)**
Segre, Beniamino On the powers of a square matrix of order $n > 2$. **(80f:15014)**
Storey, Colin *See* **Frost, M. G., (80a:93052)**
Taussky, Olga Some comments concerning G. B. Price's note on: "Determinants with dominant principal diagonal: a personal historical note" (Linear and Multilinear Algebra **6** (1978/79), no. 4, 247–250). **(80c:01018b)**
Valiant, Leslie G. The complexity of computing the permanent. **(80f:68054)**
Wang, Chung Lie Extensions of determinantal inequalities. **(80g:15019)**

15A18 Eigenvalues, singular values, and eigenvectors

Alexander, J. C. Matrices, eigenvalues, and complex projective space. **80a:15009**
Berlioz, J. P. À propos de l'algorithme QZ. (English summary) **80g:15009**
de Boor, Carl (*with* Golub, Gene H.) The numerically stable reconstruction of a Jacobi matrix from spectral data. **80i:15007**
Calogero, F. (*with* Perelomov, A. M.) Some Diophantine relations involving circular functions of rational angles. **80d:15010**
Carlson, David H. (*with* Datta, Biswa Nath) On the effective computation of the inertia of a non-Hermitian matrix. **80k:15013**
Datta, Biswa Nath *See* **Carlson, David H., 80k:15013**
Gohberg, Israel (*with* Rodman, Leiba) On spectral analysis of non-monic matrix and operator polynomials. I. Reduction to monic polynomials. **80a:15010**
Golub, Gene H. *See* **de Boor, Carl, 80i:15007**
Guralnick, Robert M. (*with* Taussky, Olga) A remark concerning unipotent matrix groups. **80b:15017**
Johnson, Charles R. Eigenset generalizations of the eigenvalue concept. **80c:15006**
Leclerc, Annette Une borne supérieure pour les valeurs propres d'une matrice symétrique. (English summary) **80a:15011**
Nwokah, Osita D. I. Estimates for the inverse of a matrix and bounds for eigenvalues. **80a:15012**
Olas, Andrzej The dependence of eigenvalues and eigenvectors on the parameters. (Polish) **80g:15010**
Perelomov, A. M. *See* **Calogero, F., 80d:15010**
Rodman, Leiba *See* **Gohberg, Israel, 80a:15010**
Stewart, G. W. Perturbation bounds for the definite generalized eigenvalue problem. **80c:15007**
Taussky, Olga *See* **Guralnick, Robert M., 80b:15017**
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Principal minors of complex symmetric and skew matrices. **80j:15007**
Veselić, Krešimir On real eigenvalues of real tridiagonal matrices. **80j:15008**
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Bunse-Gerstner, A. Berechnung der Eigenwerte einer Matrix mit dem HR-verfahren. (English summary) **(80m:65027)**
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Johnson, Charles R. (*with* Kellogg, R. B.; Stephens, A. B.) Complex eigenvalues of a nonnegative matrix with a specified graph. II. **(80g:15020a)**
Kellogg, R. B. *See* **Johnson, Charles R.; et al., (80g:15020a)**
Luong Dinh Tin The comparison of spectrum of normalizable matrices. (Russian and Czech summaries) **(80a:47036)**
Melkman, Avraham A. *See* **Friedland, Shmuel, (80i:15015)**
Parthasarathy, Kalyanapuram Rangachari Eigenvalues of matrix-valued analytic maps. **(80b:47016)**
Selmi, Giovanni Necessary and sufficient conditions for the existence of subspaces invariant for A^h but not for A. (Italian) **(80a:15002)**
van der Sluis, A. Gershgorin domains for partitioned matrices. **(80f:15015)**
Stephens, A. B. *See* **Johnson, Charles R.; et al., (80g:15020a)**
Textor, Wolfgang A theorem on maximum variance. **(80c:81028)**
Van Dooren, Paul M. The computation of Kronecker's canonical form of a singular pencil. **(80g:65042)**

15A21 Canonical forms, reductions, classification

Ballantine, C. S. Cosquares: complex and otherwise. **80i:15008**
Bhattacharyya, B. B. *See* **Chakrabarti, S.; et al., 80e:15006**
Chakrabarti, S. (*with* Bhattacharyya, B. B.; Swamy, M. N. S.) On simultaneous

diagonalization of a collection of Hermitian matrices. **80e:15006**

Feinberg, Robert B. The identity as a matrix commutator. **80e:15007**

Gohberg, Israel (*with* Rodman, Leiba) On the spectral structure of monic matrix polynomials and the extension problem. **80d:15011**

Hills, Norman L. Transposing a matrix by similarity operations. **80a:15013**

Laffey, Thomas J. Simultaneous triangularization of matrices—low rank cases and the nonderogatory case. **80d:15012**

Nasirov, S. N. The canonical form of the matrix of a linear operator in finite-dimensional modules over semifields. (Russian) **80i:15009**

Newman, Morris Equivalence without determinantal divisors. **80k:15018**

Okuh, Frank Direct sums and direct products of canonical pencils of matrices. **80h:15004**

Rodman, Leiba *See* **Gohberg, Israel, 80d:15011**

Sasaki, Hiroshi A new approach to the reduction of matrices to Jordan normal form. **80h:15005**

Saunders, B. David (*with* Schneider, Hans) Flows on graphs applied to diagonal similarity and diagonal equivalence for matrices. **80e:15008**

Schneider, Hans *See* **Saunders, B. David, 80e:15008**

Seisl, Giovanni The group of operators that leave invariant the canonical representation of a particular class of doubly covariant tensors with noncoincident kernels. (Italian) **80c:15008**

Shapiro, H. Simultaneous block triangularization and block diagonalization of sets of matrices. **80e:15009**

Suprunenko, D. A. (*with* Tyškevič, R. I.) The similarity and substitutive equivalence of (0, 1)-matrices. (Russian. English summary) **80f:15012**

Swamy, M. N. S. *See* **Chakrabarti, S.; et al., 80e:15006**

Tyškevič, R. I. *See* **Suprunenko, D. A., 80f:15012**

Uhlig, Frank A rational canonical pair form for a pair of symmetric matrices over an arbitrary field F with char $F \neq 2$ and applications to finest simultaneous block diagonalizations. (German summary) **80j:15009**

Varga, Gyula Similarity reduction of singular symmetric matrices. (Hungarian. English summary) **80k:15015**

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Cappell, Sylvain E. (*with* Shaneson, Julius L.) Nonlinear similarity of matrices. **(80m:57010)**

Dewilde, Patrick *See* **Van Dooren, Paul M.; et al., (80b:93061)**

Dinkevič, S. Z. Explicit quasi-spectral decompositions of some types of matrices. (Russian) **(80a:65066)**

Dostál, Zdeněk Uniqueness of the operator attaining $C(H_n, r, n)$. (Russian summary) **(80b:47019)**

Green, Edward L. (*with* Reiner, Irving) Integral representations and diagrams. **(80g:16032)**

Helwig, Georg Verallgemeinerte Resultantenbegriffe bei beliebigen Matrixbüscheln. I. Einseitiger Resultantenoperator. **(80g:15015a)**

Verallgemeinerte Resultantenbegriffe bei beliebigen Matrixbüscheln. II. Gemischter Resultantenoperator. **(80g:15015b)**

Kaashoek, M. A. Recent developments in the spectral analysis of matrix and operator polynomials. **(80m:47015)**

Paulsen, Vern Continuous canonical forms for matrices under unitary equivalence. **(80j:46110)**

Ramachandran, Vijaya Exact reduction of a polynomial matrix to the Smith normal form. **(80h:93006)**

Reckziegel, Ingeborg (*with* Tasche, Manfred) Eine verallgemeinerte Inverse eines Matrizenpolynoms. **(80k:15009)**

Reiner, Irving *See* **Green, Edward L., (80g:16032)**

Schmitt, B. A. Eine explizite Darstellung der Funktion einer Dreiecksmatrix. **(80g:65047)**

Shaneson, Julius L. *See* **Cappell, Sylvain E., (80m:57010)**

Tasche, Manfred *See* **Reckziegel, Ingeborg, (80k:15009)**

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Vandewalle, Joos *See* **Van Dooren, Paul M.; et al., (80b:93061)**

Van Dooren, Paul M. (*with* Dewilde, Patrick; Vandewalle, Joos) On the determination of the Smith-Macmillan form of a rational matrix from its Laurent expansion. **(80b:93061)**

The computation of Kronecker's canonical form of a singular pencil. **(80g:65042)**

15A23 Factorization of matrices

Delsarte, Philippe (*with* Genin, Yves V.; Kamp, Yves G.) Schur parametrization of positive definite block-Toeplitz systems. **80d:15013**

Elsner, L. On some algebraic problems in connection with general eigenvalue algorithms. **80e:15010**

Evans, David J. (*with* Okolie, S. O.) A generalised sparse factorisation method for the solution of periodic tridiagonal systems. **80g:15011**

Genin, Yves V. *See* **Delsarte, Philippe; et al., 80d:15013**

Golub, Gene H. (*with* Van Loan, Charles) Unsymmetric positive definite linear systems. **80k:15016**

Hackl, J. Zerlegung positiv semidefiniter Matrizen und Anwendungen in der Optimierung. **80b:15019**

Kamp, Yves G. *See* **Delsarte, Philippe; et al., 80d:15013**

Kazimirskiĭ, P. S. The solution of the problem of the separation of a regular multiplier from a matrix polynomial. (Russian. English summary) **80a:15014**

Lau, Cony M. (*with* Markham, Thomas L.) *LU* factorizations. (Russian summary) **80j:15010**

Markham, Thomas L. *See* **Lau, Cony M., 80j:15010**

Okolie, S. O. *See* **Evans, David J., 80g:15011**

Smith, Ronald L. Factorization of symmetric singular M-matrices. **80c:15009**

Van Loan, Charles *See* **Golub, Gene H., 80k:15016**

Secondary classifications:

Ahmed, N. (*with* Chen, M. C.) On a matrix factorization algorithm. **(80f:68039)**

Andres, Ronald P. *See* **Kantor, Jeffrey C., (80k:93045)**

Babikov, G. V. Factorization of matrices over rings and division rings. (Russian) **(80i:15013)**

Chen, M. C. *See* **Ahmed, N., (80f:68039)**

Fuhrmann, Paul A. Simulation of linear systems and factorization of matrix polynomials. **(80b:93002)**

Fulton, John D. Generalized inverses of matrices over fields of characteristic two. **(80i:15004)**

Goel, V. K. *See* **Jain, S. K.; et al., (80k:15008)**

Jain, S. K. (*with* Kwak, Edward K.; Goel, V. K.) Decomposition of nonnegative group-monotone matrices. **(80k:15008)**

Johnson, Larry S. (*with* Porter, A. Duane; Varineau, Verne J.) Commutators over finite fields. **(80d:15017)**

Kantor, Jeffrey C. (*with* Andres, Ronald P.) A note on the extension of Rosenbrock's Nyquist array techniques to a larger class of transfer function matrices. **(80k:93045)**

Kwak, Edward K. *See* **Jain, S. K.; et al., (80k:15008)**

McFall, John D. How to compute the elementary divisors of the tensor product of two matrices. **(80h:15007)**

Porter, A. Duane *See* **Johnson, Larry S.; et al., (80d:15017)**

Thompson, Robert C. The case of equality in the matrix-valued triangle inequality. **(80k:15027)**

Todorov, Todor Stefanov An algorithm describing all pairs (L, R) of factors in the decomposition $P = LR$ for a class of infinite numerical matrices. (Bulgarian. Russian and English summaries) **(80c:65099)**

Varineau, Verne J. *See* **Johnson, Larry S.; et al., (80d:15017)**

Wimmer, H. K. A Jordan factorization theorem for polynomial matrices. **(80k:15032)**

15A24 Matrix equations and identities

Ando, Tsuyoshi Generalized Schur complements. **80m:15005**

Baksalary, Jerzy K. (*with* Kala, Radosław) The matrix equation $AX - YB = C$. **80d:15014**

Balasubramanian, K. On equality of some elements in matrices. **80c:15010**

Barnett, Stephen *See* **Maroulas, John, 80a:15015**

Borosh, Itshak (*with* Treybig, L. B.) Bounds on positive integral solutions of linear Diophantine equations. II. **80m:15006**

Campbell, Stephen L. (*with* Daughtry, John) The stable solutions of quadratic matrix equations. **80d:15015**

Carlson, David H. (*with* Datta, Biswa Nath) The Lyapunov matrix equation $SA + A^*S = S^*B^*BS$. **80k:15017**

Datta, Biswa Nath *See* **Carlson, David H., 80k:15017**

Daughtry, John *See* **Campbell, Stephen L., 80d:15015**

Dostál, Zdeněk Negative powers and the spectrum of matrices. **80e:15011**

Ellers, Erich W. Products of two involutory matrices over skewfields. **80g:15012**

Estes, Dennis R. Determinants of Galois automorphisms of maximal commutative rings of 2×2 matrices. **80i:15010**

Gohberg, Israel (*with* Lancaster, Peter; Rodman, Leiba) On selfadjoint matrix polynomials. **80k:15018**

Gustafson, William H. (*with* Zelmanowitz, Julius M.) On matrix equivalence and matrix equations. **80i:15011**

Haritonov, V. L. (*with* Hitrov, G. M.) On the solution of the Ljapunov matrix equation. (Russian) **80f:15013**

Hartfiel, D. J. (*with* Smith, Patricia L.) Remarks on the rows and columns of P in the matrix equation $A = PP^*$. **80d:15016**

Hitrov, G. M. *See* **Haritonov, V. L., 80f:15013**

Johnson, Larry S. (*with* Porter, A. Duane; Varineau, Verne J.) Commutators over finite fields. **80d:15017**

Kala, Radosław *See* **Baksalary, Jerzy K., 80d:15014**

Lancaster, Peter *See* **Gohberg, Israel; et al., 80k:15018**

Maroulas, John (*with* Barnett, Stephen) Greatest common divisor of generalized polynomial and polynomial matrices. **80a:15015**

Masser, D. W. (*with* Neumann, Michael) On the square roots of strictly quasi-accretive complex matrices. **80j:15011**

Neumann, Michael *See* **Masser, D. W., 80j:15011**

Pearson, K. R. A lower bound for the degree of polynomials satisfied by matrices. **80i:15012**

Porter, A. Duane *See* **Johnson, Larry S.; et al., 80d:15017**

Pták, Vlastimil An infinite companion matrix. **80h:15006**

Rodman, Leiba *See* **Gohberg, Israel; et al., 80k:15018**

Segre, Beniamino On the powers of a square matrix of order $n \geq 2$. **80f:15014**

van der Sluis, A. Gershgorin domains for partitioned matrices. **80f:15015**

Smith, Patricia L. *See* **Hartfiel, D. J., 80d:15016**

Treybig, L. B. *See* **Borosh, Itshak, 80m:15006**

Varineau, Verne J. *See* **Johnson, Larry S.; et al., 80d:15017**

Young, N. J. Norms of matrix powers. **80g:15013**

Zelmanowitz, Julius M. *See* **Gustafson, William H., 80i:15011**

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Antsaklis, P. J. Some relations satisfied by prime polynomial matrices and their role in linear multivariable system theory. **(80j:93043)**

Barraud, A. Y. Investigations autour de la fonction signe d'une matrice: application à l'équation de Riccati. (English summary) **(80m:65022)**

Bart, H. (*with* Gohberg, Israel; Kaashoek, M. A.) Stable factorizations of monic matrix polynomials and stable invariant subspaces. **(80b:47018)**

Datta, Biswa Nath An elementary proof of the stability criterion of Liénard and Chipart. **(80a:34058)**

Evans, David J. (*with* Okolie, S. O.) A generalised sparse factorisation method for the

solution of periodic tridiagonal systems. **(80g:15011)**

Gohberg, Israel (*with* Rodman, Leiba) On spectral analysis of non-monic matrix and operator polynomials. I. Reduction to monic polynomials. **(80a:15010)**
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Hall, Frank J. (*with* Hartwig, Robert E.; Katz, Irving J.) A note on pseudosimilarity of matrices. **(80g:15005)**

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Iljuščkin, N. V. Polynomial representation of smooth matrix-valued functions. (Russian. French summary) **(80g:58014)**

Kaashoek, M. A. *See* **Bart, H.; et al., (80b:47018)**

Katz, Irving J. *See* **Hall, Frank J.; et al., (80g:15005)**

Mousouris, Nick (*with* Porter, A. Duane) The Hermitian matric equation $U_n^* \cdots U_1^* A U_1 \cdots U_n = B$. (French summary) **(80m:15008)**
See also **Porter, A. Duane, (80m:15011)**

Okolie, S. O. *See* **Evans, David J., (80g:15011)**

Porter, A. Duane Some partitions of a symmetric matrix. **(80m:15010)**
(*with* Mousouris, Nick) Ranked solutions of $AXC = B$ and $AX = B$. **(80m:15011)**
See also **Mousouris, Nick, (80m:15008)**

Rodman, Leiba *See* **Gohberg, Israel, (80a:15010)**

Rothblum, Uriel G. An index classification of M-matrices. **(80d:15006)**

Schmitt, B. A. Eine explizite Darstellung der Funktion einer Dreiecksmatrix. **(80g:65047)**

Spindelböck, Klaus Die M-P-Inverse des Produktes zweier in Jordanscher Normalform gegebener Matrizen. **(80h:15003)**

Wolovich, W. A. Skew prime polynomial matrices. **(80c:93012)**

15A27 Commutativity

Laffey, Thomas J. Simultaneous quasidiagonalization of a pair of 3×3 complex matrices. **80g:15014**

Pierce, Stephen (*with* Watkins, William) Invariants of linear maps on matrix algebras. **80f:15016**

Sen Gupta, Nanda Dulal On mutually anti-commuting matrices. (Italian summary) **80c:15011**

Watkins, William *See* **Pierce, Stephen, 80f:15016**

Secondary classifications:

Wang, Edward T. H. A combinatorial application of the Frobenius inequality on rank function to maximum set of commuting nilpotent matrices. **(80k:15019)**

15A30 Algebraic systems of matrices [See also 16A42, 20Gxx, 20Hxx.]

Babaev, È. A. Semiheaps of homomorphisms of linear spaces. (Russian. Azerbaijani and English summaries) **80b:15020**

Heinig, Georg Verallgemeinerte Resultantenbegriffe bei beliebigen Matrixbüscheln. I. Einseitiger Resultantenoperator. **80g:15015a**
Verallgemeinerte Resultantenbegriffe bei beliebigen Matrixbüscheln. II. Gemischter Resultantenoperator. **80g:15015b**

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Micchelli, Charles A. (*with* Willoughby, R. A.) On functions which preserve the class of Stieltjes matrices. **80b:15022**

Šavarovskiĭ, B. Z. Characteristic vectors and similarity of matrix pencils of simple structure. (Russian) **80e:15012**

Taussky, Olga Some remarks concerning matrices of the form $A - A'$, $A^{-1}A'$. (German summary) **80d:15018**

Wang, Edward T. H. A combinatorial application of the Frobenius inequality on rank function to maximum set of commuting nilpotent matrices. **80k:15019**

Willoughby, R. A. *See* **Micchelli, Charles A., 80b:15022**

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Dalić, Vučić Some unary operations with matrices and the near-ring of affine transformations. (Serbo-Croatian. English summary) **(80k:15003)**

Karr, Alan F. Markov chains and processes with a prescribed invariant measure. **(80c:60083)**

15A33 Matrices over special rings (quaternions, finite fields, etc.)

Anderson, Brian D. O. Structure of a class of unimodular matrices. **80a:15016**

Babikov, G. V. Factorization of matrices over rings and division rings. (Russian) **80c:15013**

Brawley, J. V. (*with* Gamble, R. O.) Involutory matrices over finite commutative rings. **80f:15017**
A note on polynomial matrix functions over a finite field. **80k:15020**

Bredihin, B. S. Existence of a quaternion matrix with prescribed eigenvalues and diagonal elements of special form. (Russian) **80m:15007**

Elsner, Thomas E. The inverse of a sum can be the sum of the inverses. **80d:15019**

Gamble, R. O. *See* **Brawley, J. V., 80f:15017**

Hodges, John H. Note on a linear matrix equation over a finite field. (Italian summary) **80k:15021**

Kuz'min, E. N. *See* **Mal'cev, Ju. N., 80b:15023**

Mal'cev, Ju. N. (*with* Kuz'min, E. N.) A basis for identities of the algebra of second-order matrices over a finite field. (Russian) **80b:15023**

McFall, John D. How to compute the elementary divisors of the tensor product of two matrices. **80h:15007**

Mousouris, Nick (*with* Porter, A. Duane) The Hermitian matric equation $U_n^* \cdots U_1^* A U_1 \cdots U_n = B$. (French summary) **80m:15008**
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Mullen, Gary L. Equivalence classes of matrices over finite fields. **80g:15016**

Petri, J. Une représentation matricielle quaternionique de l'algèbre de Dirac-Clifford et celle de Cayley. **80m:15009**

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(*with* Mousouris, Nick) Ranked solutions of $AXC = B$ and $AX = B$. **80m:15011**
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Bhandari, S. K. (*with* Nanda, V. C.) Ideal matrices for relative extensions. **(80m:12003)**

Ellers, Erich W. Products of two involutory matrices over skewfields. **(80g:15012)**

Formanek, Edward The center of the ring of 3×3 generic matrices. **(80h:16019)**

Fulton, John D. Generalized inverses of matrices over fields of characteristic two. **(80i:15004)**

Guralnick, Robert M. (*with* Taussky, Olga) A remark concerning unipotent matrix groups. **(80b:15017)**

Ishaq, M. (*with* Merris, Russell) Matrix functions afforded by entries of unitary representations. **(80h:20020)**

Jiang, Sheng A simple construction of a $2p \times 2p$ difference scheme with an arbitrary odd prime modulus p. (Chinese) **(80m:05016)**

Kruglov, S. I. (*with* Stražev, V. I.; Tolkačev, E. A.) Symmetries of the classical theory of a vector field of general type. (Russian. English summary) **(80d:78014)**

Merris, Russell *See* **Ishaq, M., (80h:20020)**

Mullin, Ronald C. (*with* Stanton, Ralph G.) A covering problem in binary spaces of finite dimension. **(80g:05018)**

Nanda, V. C. *See* **Bhandari, S. K., (80m:12003)**

Pierce, Stephen Discriminant preserving linear maps. **(80k:15012)**

Sdvižkov, O. A. *See* **Zamahovskiĭ, M. P.; et al., (80g:53039)**

Stanton, Ralph G. *See* **Mullin, Ronald C., (80g:05018)**

Stražev, V. I. *See* **Kruglov, S. I.; et al., (80d:78014)**

Taussky, Olga *See* **Guralnick, Robert M., (80b:15017)**

Tolkačev, E. A. *See* **Kruglov, S. I.; et al., (80d:78014)**

Warfield, Robert B., Jr. Stable equivalence of matrices and resolutions. **(80c:16021)**

Zamahovskiĭ, M. P. (*with* Želtjakova, Z. N.; Sdvižkov, O. A.) Semiquadriquaternionic elliptic and pseudoelliptic spaces. (Russian) **(80g:53039)**

Želtjakova, Z. N. *See* **Zamahovskiĭ, M. P.; et al., (80g:53039)**

15A36 Matrices of integers [See also 10M20.]

Abian, Alexander (*with* Salbany, Sergio) Dyadic matrices and Wallman compactification. **80k:15023**

Arazi, Benjamin Some properties of Hadamard matrices generated recursively by Kronecker products. **80c:15012**

Batigne, Daniel R. (*with* Hall, Frank J.; Katz, Irving J.) Further results on integral generalized inverses of integral matrices. **80d:15020**

Blake, Ian F. (*with* Melkman, Avraham A.) On an inverse for sections of a binomial matrix. **80a:15017**

Brualdi, Richard A. Disjoint permutation matrices in complements of trees. **80k:15024**

Burkill, H. Universal matrices. **80b:15024**

Chandrasekaran, R. *See* **Truemper, K., 80f:15018**

Hall, Frank J. *See* **Batigne, Daniel R.; et al., 80d:15020**

Houck, David J. (*with* Paul, Michael E.) Non-singular 0-1 matrices with constant row and column sums. **80a:15018**

Katz, Irving J. *See* **Batigne, Daniel R.; et al., 80d:15020**

Melkman, Avraham A. *See* **Blake, Ian F., 80a:15017**

Paul, Michael E. *See* **Houck, David J., 80a:15018**

Salbany, Sergio *See* **Abian, Alexander, 80k:15023**

Thompson, Robert C. The Smith invariants of a matrix sum. **80i:15014**

Truemper, K. (*with* Chandrasekaran, R.) Local unimodularity of matrix-vector pairs. **80f:15018**

Secondary classifications:

Britton, J. L. On the conjugacy problem and difference equations. **(80k:20039)**

Donaldson, John L. Minkowski reduction of integral matrices. **(80b:10044)**

Hall, Frank J. (*with* Katz, Irving J.) On ranks of integral generalized inverses of integral matrices. **(80d:15004)**

Hall, Marshall, Jr. Integral properties of combinatorial matrices. **(80g:05011)**

Katz, Irving J. *See* **Hall, Frank J., (80d:15004)**

Lloyd, A. M. A consideration of orthogonal matrices, other than the Rademacher-Walsh types, for the synthesis of digital networks. **(80k:94046)**

Maloney, John P. A non graph theory approach to Ulam's conjecture. **(80g:05017)**

Niederreiter, Harald (*with* Shiue, Jau Shyong) Uniform distribution of sequences in rings of integral matrices. **(80h:10058)**

Sarkisjan, R. A. The conjugacy problem for collections of integral matrices. (Russian) **(80k:20046)**

Selmi, Giovanni The group of operators that leave invariant the canonical representation of a particular class of doubly covariant tensors with noncoincident kernels. (Italian) **(80c:15008)**

Shiue, Jau Shyong *See* **Niederreiter, Harald, (80h:10058)**

Suprunenko, D. A. (*with* Tyškevič, R. I.) The similarity and substitutive equivalence of (0, 1)-matrices. (Russian. English summary) **(80f:15012)**

Tyškevič, R. I. *See* **Suprunenko, D. A., (80f:15012)**

15A39 Linear inequalities

Searcy, J. L. (*with* Troesch, B. A.) A cyclic inequality and a related eigenvalue problem. **80f:15019**

Troesch, B. A. *See* **Searcy, J. L., 80f:15019**

Secondary classifications:

Chong, Kong Ming A note on Tchebychef's inequality. **(80f:26011)**
Cope, J. E. (*with* Rust, B. W.) Bounds on solutions of linear systems with inaccurate data. **(80m:65041)**
Laczkovich, M. Solvability and consistency for infinite systems of linear inequalities. **(80c:03024)**
Rust, B. W. *See* **Cope, J. E., (80m:65041)**

15A42 Inequalities involving eigenvalues and eigenvectors

Atherton, D. P. *See* **Mees, Alistair I., 80f:15021**
Bhatia, Rajendra (*with* Mukherjea, Kalyan K.) On the rate of change of spectra of operators. **80h:15008**
Deutsch, Emeric On the spread of matrices and polynomials. **80a:15019**
Ding, Xie Ping Bounds for the largest eigenvalue and eigenvector of a nonnegative irreducible matrix. (Chinese) **80f:15020**
Johnson, Charles R. Partitioned and Hadamard product matrix inequalities. **80b:15025**
Marques de Sá, E. Imbedding conditions for λ-matrices. **80g:15017**
Mees, Alistair I. (*with* Atherton, D. P.) Domains containing the field of values of a matrix. **80f:15021**
Mukherjea, Kalyan K. *See* **Bhatia, Rajendra, 80h:15008**
Palmer, Kenneth J. A sufficient condition that a matrix have eigenvalues with non-zero real parts. **80b:15026**
Rao, C. Radhakrishna Separation theorems for singular values of matrices and their applications in multivariate analysis. **80j:15013**
Schönhage, Arnold Arbitrary perturbations of Hermitian matrices. **80m:15012**
Tong, Wen Ting A bound for the dominance ratio of a nonnegative matrix. (Chinese. English summary) **80g:15018**
Young, N. J. Norms of certain rational functions of a matrix and Schur's criterion for *polynomials*. **80d:15021**

Secondary classifications:

Gohberg, Israel (*with* Kaashoek, M. A.) Unsolved problems in matrix and operator theory. I. Partial multiplicities and additive perturbations. **(80i:47024a)**
(*with* Kaashoek, M. A.) *Unsolved problems in matrix and operator theory. II.* Partial multiplicities for products. **(80i:47024b)**
Haemers, Willem A generalization of the Higman-Sims technique. **(80c:05044)**
Kaashoek, M. A. *See* **Gohberg, Israel, (80i:47024a)** *and* **Gohberg, Israel, (80i:47024b)**
Kamenarov, G. N. A seminorm for normal matrices and some of its applications. *(Bulgarian. Russian and French summaries)* **(80m:15018)**
Luong Dinh Tin The comparison of spectrum of normalizable matrices. (Russian and Czech summaries) **(80a:47036)**
Thompson, Robert C. Singular values and diagonal elements of complex symmetric matrices. **(80f:15011)**
Principal minors of complex symmetric and skew matrices. **(80j:15007)**
Vitória, José Matricial norms and the difference between the zeros of determinants with polynomial elements. **(80k:15014)**

15A45 Miscellaneous inequalities involving matrices

Ando, Tsuyoshi Structure of quadratic inequalities. **80h:15009**
Kaljužnyi, V. N. Critical index of contractions in Euclidean space. (Russian) **80k:15025**
Marques de Sá, E. On the existence of matrices with constrained elements, rows and columns. **80b:15027**
Merris, Russell Inequalities involving the inverses of positive definite matrices. **80f:15022**
Patel, Rajnikant (*with* Toda, Mitsuhiko) Trace inequalities involving Hermitian matrices. **80b:15028**
Pinkus, Allan Matrices and *n*-widths. **80k:15026**
Thompson, Robert C. The case of equality in the matrix-valued triangle inequality. **80k:15027**
Toda, Mitsuhiko *See* **Patel, Rajnikant, 80b:15028**
Wang, Chung Lie Extensions of determinantal inequalities. **80g:15019**
Gramian expansions and their applications. **80e:15013**

Secondary classifications:

Agrawala, Vishnu K. (*with* Chao, Chong Yun) Equalities and inequalities for ranks of modules. **(80g:15001)**
Chao, Chong Yun *See* **Agrawala, Vishnu K., (80g:15001)**
Gohberg, Israel (*with* Lancaster, Peter; Rodman, Leiba) On selfadjoint matrix polynomials. **(80k:15018)**
Hartfiel, D. J. Sign compatible expressions for minors of the matrix $I - A$. **(80k:15028)**
Lancaster, Peter *See* **Gohberg, Israel; et al., (80k:15018)**
Lyle, Bill A linear-algebra problem from algebraic coding theory. **(80a:05013)**
Paz, Azaria A generalization of the Cayley Hamilton theorem and possible applications to formal series theory. **(80d:68104)**
Pták, Vlastimil A maximum problem for matrices. **(80k:15035)**
Rodman, Leiba *See* **Gohberg, Israel; et al., (80k:15018)**
Voorhoeve, M. A lower bound for the permanents of certain (0, 1)-matrices. **(80c:15005)**

15A48 Positive matrices and their generalizations

Ando, Tsuyoshi Concavity of certain maps on positive definite matrices and applications to Hadamard products. **80f:15023**
Baksalary, Jerzy K. (*with* Kala, Radosław) Two relations between oblique and Λ-orthogonal projectors. **80c:15013**
Barker, George Phillip Perfect cones. **80a:15020**
Bellman, Richard E. Selective computation. II. The positive definite square root of a positive definite matrix. **80c:15014**
Bhagwat, K. V. *See* **Subramanian, R., 80k:15030**
Čistjakov, V. P. On the estimation of the Perron root of nonnegative matrices. (Russian) **80f:15024**
Friedland, Shmuel On an inverse problem for nonnegative and eventually nonnegative matrices. **80h:15010**
(*with* Melkman, Avraham A.) On the eigenvalues of nonnegative Jacobi matrices. **80f:15015**
Garcia, C. B. (*with* Zangwill, W. I.) On univalence and *P*-matrices. **80d:15022**
Hartfiel, D. J. Sign compatible expressions for minors of the matrix $I - A$. **80k:15028**
Johnson, Charles R. (*with* Leighton, Frank Thomson; Robinson, Herbert A.) Sign patterns of inverse-positive matrices. **80h:15011**
(*with* Kellogg, R. B.; Stephens, A. B.) Complex eigenvalues of a nonnegative matrix with a specified graph. II. **80g:15020a**
(*with* Kellogg, R. B.; Stephens, A. B.) Erratum to: "Complex eigenvalues of a nonnegative matrix with a specified graph. II" (Linear and Multilinear Algebra 7 (1979), no. 2, 129–143). **80g:15020b**
Kala, Radosław *See* **Baksalary, Jerzy K., 80c:15013**
Kellogg, R. B. *See* **Johnson, Charles R.; et al., 80g:15020a** *and* **Johnson, Charles R.; et al., 80g:15020b**
Kim, Ki Hang (*with* Roush, Fred W.) Ultrametrics and matrix theory. **80a:15021**
Leighton, Frank Thomson *See* **Johnson, Charles R.; et al., 80h:15011**
Lorenz, Jens (*with* Mackens, Wolfgang) Toeplitz matrices with totally nonnegative inverses. **80b:15029**
Mackens, Wolfgang *See* **Lorenz, Jens, 80b:15029**
Melkman, Avraham A. *See* **Friedland, Shmuel, 80f:15015**
Robinson, Herbert A. *See* **Johnson, Charles R.; et al., 80h:15011**
Rothblum, Uriel G. A rank characterization of the number of final classes of a nonnegative matrix. **80b:15030**
Roush, Fred W. *See* **Kim, Ki Hang, 80a:15021**
Salazar, Tomas Eufracio An abstract matrix model: the column model. **80k:15029**
Ševčuk, I. S. On the question of complete positivity of powers of matrices. (Russian) **80a:15022**
Stephens, A. B. *See* **Johnson, Charles R.; et al., 80g:15020a** *and* **Johnson, Charles R.; et al., 80g:15020b**
Subramanian, R. (*with* Bhagwat, K. V.) On a theorem of Wigner on products of positive matrices. **80k:15030**
Wall, J. R. *Rank factorizations of positive operators.* **80k:15031**
Zangwill, W. I. *See* **Garcia, C. B., 80d:15022**

Secondary classifications:

Bunse, Wolfgang Diagonaltransformationsverfahren zur Bestimmung des Spektralradius nichtnegativer irreduzibler Matrizen. (English summary) **(80m:65026)**
Christensen, Jens Peter Reus (*with* Vesterstrøm, J.) A note on extreme positive definite matrices. **(80m:15015)**
Fujimoto, T. Nonlinear generalization of the Frobenius theorem. A symmetric approach. **(80h:90022)**
Goel, V. K. *See* **Jain, S. K.; et al., (80k:15008)** *and* **Jain, S. K.; et al., (80m:15002)**
Jain, S. K. (*with* Goel, V. K.; Kwak, Edward K.) Nonnegative *m*th roots of nonnegative 0-symmetric idempotent matrices. **(80m:15002)**
(*with* Kwak, Edward K.; Goel, V. K.) Decomposition of nonnegative group-monotone matrices. **(80k:15008)**
Kwak, Edward K. *See* **Jain, S. K.; et al., (80k:15008)** *and* **Jain, S. K.; et al., (80m:15002)**
Masser, D. W. (*with* Neumann, Michael) On the square roots of strictly quasi-accretive complex matrices. **(80j:15011)**
Melkman, Avraham A. (*with* Micchelli, Charles A.) Spline spaces are optimal for L^2 *n*-width. **(80d:41013)**
Micchelli, Charles A. *See* **Melkman, Avraham A., (80d:41013)**
Neumann, Michael *See* **Masser, D. W., (80j:15011)**
Olkin, Ingram Matrix extensions of Liouville-Dirichlet-type integrals. **(80i:26015)**
Rothblum, Uriel G. An index classification of *M*-matrices. **(80d:15006)**
Smith, Ronald L. Factorization of symmetric singular *M*-matrices. **(80c:15009)**
Vesterstrøm, J. *See* **Christensen, Jens Peter Reus, (80m:15015)**

15A51 Stochastic matrices

Achilles, Eva Doubly stochastic matrices with some equal diagonal sums. **80e:15014**
Christian, Floyd L., Jr. A *k*-measure of irreducibility and doubly stochastic matrices. **80d:15023**
Cocan, A. *See* **Cocan, M., 80e:15015**
Cocan, M. (*with* Cocan, A.) On the eigenvalues of the stochastic transition function matrix of a finite Markov chain. (Romanian. German summary) **80e:15015**
Foregger, Thomas H. Remarks on a conjecture of M. Marcus and H. Minc. **80f:15025**
Johnsen, Eugene C. Stochastic matrices: some results and applications. **80g:15021**
Marchi, Ezio (*with* Tarazaga, Pablo) About (k, n) stochastic matrices. **80f:15026**
Nishi, Akihiro An elementary proof of Johnson-Dulmage-Mendelsohn's refinement of Birkhoff's theorem on doubly stochastic matrices. **80g:15022**
Sinkhorn, Richard A relationship between stochastic matrices and eigenvalues of products. **80d:15024**
Stolov, E. L. The spectrum of normal and symmetric stochastic matrices. (Russian) **80e:15016**
Tarazaga, Pablo *See* **Marchi, Ezio, 80f:15026**
Witte, Frank Doubly stochastic matrices and sequential data association. I. **80m:15013**

Secondary classifications:

Balasubramanian, K. On equality of some elements in matrices. **(80c:15010)**
Brenner, J. L. (*with* Wang, Edward T. H.) Permanental pairs of doubly stochastic matrices. II. **(80k:15011)**

Federgrün, A. (*with* Hordijk, A.; Tijms, H. C.) A note on simultaneous recurrence conditions on a set of denumerable stochastic matrices. **(80a:60087)**
Friedland, Shmuel (*with* Minc, Henryk) Monotonicity of permanents of doubly stochastic matrices. **(80b:15013)**
Fritz, Franz-Josef (*with* Huppert, Bertram; Willems, Wolfgang) ★Stochastische Matrizen. **(80g:60066)**
Gyires, B. On permanent inequalities. **(80g:15007)**
Hordijk, A. *See* **Federgrün, A.; et al., (80a:60087)**
Huppert, Bertram *See* **Fritz, Franz-Josef; et al., (80g:60066)**
Kárka, P. Merging of states of Markov chains with infinite probability rates. **(80g:60072)**
Minc, Henryk *See* **Friedland, Shmuel, (80b:15013)**
Sakanaki, Kazuo (*with* Takahashi, Wataru) Systems of convex inequalities and their applications. **(80j:46075)**
Takahashi, Wataru *See* **Sakanaki, Kazuo, (80j:46075)**
Taylor, G. C. A topological version of some ergodic theorems. **(80a:47014)**
Tijms, H. C. *See* **Federgrün, A.; et al., (80a:60087)**
Wang, Edward T. H. *See* **Brenner, J. L., (80k:15011)**
Willems, Wolfgang *See* **Fritz, Franz-Josef; et al., (80g:60066)**

15A52 Random matrices

Antoun, John T. (*with* Grünbaum, F. Alberto) The lowest eigenvalue of a random matrix. **80m:15014**
Grünbaum, F. Alberto *See* **Antoun, John T., 80m:15014**
Handelman, Michael A generalized eigenvalue distribution. **80a:15023**

Secondary classifications:

Nawrotzki, Kurt Weak ergodicity of stationary random sequences of stochastic matrices. (Russian) **(80k:60042)**

15A54 Matrices over function rings in one or more variables

Anderson, Brian D. O. *See* **Bitmead, Robert R.; et al., 80a:15024**
Bitmead, Robert R. (*with* Kung, Sun Yuan; Anderson, Brian D. O.; Kailath, Thomas) Greatest common divisors via generalized Sylvester and Bezout matrices. **80a:15024**
Gingold, H. A method of global blockdiagonalization for matrix-valued functions. **80a:15025**
On continuous triangularization of matrix functions. **80g:15023**
Kailath, Thomas *See* **Bitmead, Robert R.; et al., 80a:15024**
Kung, Sun Yuan *See* **Bitmead, Robert R.; et al., 80a:15024**
Wimmer, H. K. A Jordan factorization theorem for polynomial matrices. **80k:15032**

Secondary classifications:

Delsarte, Philippe (*with* Genin, Yves V.; Kamp, Yves G.) Schur parametrization of positive definite block-Toeplitz systems. **(80d:15013)**
Genin, Yves V. *See* **Delsarte, Philippe; et al., (80d:15013)**
Kamp, Yves G. *See* **Delsarte, Philippe; et al., (80d:15013)**

15A57 Other types of matrices (Hermitian, skew-Hermitian, etc.)

Balins'kiĭ, A. Ĭ. (*with* Li-Gjun-Y) Inversion of Hankel and Toeplitz matrices. (Russian) **80f:15016**
Ballantine, C. S. Products of complic cosquares and pseudo-involutory matrices. **80k:15017**
Broyden, C. G. A note on Guinand's theorem. **80h:15012**
Christensen, Jens Peter Reus (*with* Vesterstrøm, J.) A note on extreme positive definite matrices. **80m:15015**
Datta, Biswa Nath On the Routh-Hurwitz-Fujiwara and the Schur-Cohn-Fujiwara theorems for the root-separation problem. **80b:15031**
Application of Hankel matrices of Markov parameters to the solutions of the Routh-Hurwitz and the Schur-Cohn problems. **80k:15033**
Davis, Philip J. Cyclic transformations of n-gons and related quadratic forms. **80g:15024**
Ferguson, Helaman Rolfe Pratt The Fibonacci pseudogroup, characteristic polynomials and eigenvalues of tridiagonal matrices, periodic linear recurrence systems and application to quantum mechanics. **80j:15014**
Gower, J. C. (*with* Laslett, G. M.) Explicit singular value decompositions, spectral decompositions and inverses of some skew-symmetric matrices. **80h:15013**
Greville, T. N. E. (*with* Trench, W. F.) Band matrices with Toeplitz inverses. **80d:15025**
Kim, Jin Bai Note on the semigroup of fuzzy matrices. **80g:15025**
Laslett, G. M. *See* **Gower, J. C., 80h:15013**
Li-Gjun-Y *See* **Balins'kiĭ, A. Ĭ., 80f:15016**
Pang, Jong Shi Hidden Z-matrices with positive principal minors. **80d:15026**
A new characterization of real H-matrices with positive diagonals. **80d:15027**
Partington, J. R. Hermitian operators for absolute norms and absolute direct sums. **80k:15034**
Trench, W. F. *See* **Greville, T. N. E., 80d:15025**
Vesterstrøm, J. *See* **Christensen, Jens Peter Reus, 80m:15015**
Yarlagadda, R. Stabilization of matrices. **80b:15032**

Secondary classifications:

Ando, Tsuyoshi Structure of quadratic inequalities. **(80h:15009)**
Barnett, Stephen *See* **Roebuck, Pamela A., (80a:15005)** *and* **Maroulas, John, (80j:93097)**
de Boor, Carl (*with* Golub, Gene H.) The numerically stable reconstruction of a Jacobi matrix from spectral data. **(80i:15007)**
Cappell, Sylvain E. (*with* Shaneson, Julius L.) Linear algebra and topology. **(80f:57016)**
Carlson, David H. (*with* Datta, Biswa Nath) The Lyapunov matrix equation $SA + A^*S = S^*B^*BS$. **(80k:15017)**
Datta, Biswa Nath *See* **Carlson, David H., (80k:15017)**
Dragomir, P. On the quasi-unitary matrices. **(80f:15005)**
Friedland, Shmuel (*with* Melkman, Avraham A.) On the eigenvalues of nonnegative Jacobi matrices. **(80i:15015)**
Friedlander, B. (*with* Morf, Martin; Kailath, Thomas; Ljung, Lennart) New inversion formulas for matrices classified in terms of their distance from Toeplitz matrices. **(80k:15006)**
Golub, Gene H. *See* **de Boor, Carl, (80i:15007)**
Haemers, Willem A generalization of the Higman-Sims technique. **(80c:05044)**
Hartfiel, D. J. (*with* Smith, Patricia L.) Remarks on the rows and columns of P in the matrix equation $A = PP^*$. **(80d:15016)**
Hill, Christopher T. The dimension-5 Lorentz invariant operator system in QCD. **(80b:81072)**
Kailath, Thomas *See* **Friedlander, B.; et al., (80k:15006)**
Ljung, Lennart *See* **Friedlander, B.; et al., (80k:15006)**
Majindar, K. N. Linear combinations of Hermitian and real symmetric matrices. **(80b:15033)**
Maroulas, John (*with* Barnett, Stephen) Properties of Hermite's matrices in stability theory. **(80j:93097)**
Masser, D. W. (*with* Neumann, Michael) On the square roots of strictly quasi-accretive complex matrices. **(80j:15011)**
Melkman, Avraham A. *See* **Friedland, Shmuel, (80i:15015)**
Morf, Martin *See* **Friedlander, B.; et al., (80k:15006)**
Neumann, Michael *See* **Masser, D. W., (80j:15011)**
Roebuck, Pamela A. (*with* Barnett, Stephen) A survey of Toeplitz and related matrices. **(80a:15005)**
Schönhage, Arnold Arbitrary perturbations of Hermitian matrices. **(80m:15012)**
Shaneson, Julius L. *See* **Cappell, Sylvain E., (80f:57016)**
Smith, Patricia L. *See* **Hartfiel, D. J., (80d:15016)**
Taussky, Olga Some remarks concerning matrices of the form $A - A'$, $A^{-1}A'$. (German summary) **(80d:15018)**
Thompson, Robert C. Singular values and diagonal elements of complex symmetric matrices. **(80f:15011)**
Yang, Chao Hui Hadamard matrices, finite sequences, and polynomials defined on the unit circle. **(80i:05024)**

15A60 Norms of matrices, numerical range, applications of functional analysis to matrix theory [See also 65F35, 65J05.]

Bode, Albert Symmetrien und Antisymmetrien der Robert'schen Quasiordnung in Matrizenräumen. (English summary) **80e:15017**
Filippenko, Ivan *See* **Marcus, Marvin, 80d:15028** *and* **Marcus, Marvin, 80g:15026**
Friedland, Shmuel A characterization of transform absolute norms. **80i:15018**
Funderlic, R. E. Some characterizations of orthant monotonic norms. **80m:15016**
Goldberg, Moshe (*with* Straus, E. G.) Norm properties of C-numerical radii. **80m:15017**
On certain finite-dimensional numerical ranges and numerical radii. **80h:15014**
Kamenarov, G. N. A seminorm for normal matrices and some of its applications. (Bulgarian. Russian and French summaries) **80m:15018**
Marcus, Marvin (*with* Filippenko, Ivan) Nondifferentiable boundary points of higher numerical range. **80g:15026**
(*with* Shure, B. N.) The numerical range of certain 0, 1-matrices. **80c:15015**
(*with* Filippenko, Ivan) Linear operators preserving the decomposable numerical range. **80d:15028**
Pták, Vlastimil A maximum problem for matrices. **80k:15035**
Saunders, B. David (*with* Schneider, Hans) Cones, graphs and optimal scalings of matrices. **80k:15036**
Schneider, Hans *See* **Saunders, B. David, 80k:15036**
Shure, B. N. *See* **Marcus, Marvin, 80c:15015**
Straus, E. G. *See* **Goldberg, Moshe, 80m:15017**
Young, N. J. Analytic programmes in matrix algebras. **80g:15027a**
Norms of powers of matrices with constrained spectra. **80g:15027b**
Zajac, Michal Continuity of the spectrum of norm-normal matrices. (Russian summary) **80d:15029**

Secondary classifications:

Brayton, Robert K. (*with* Tong, Christopher H.) Stability of dynamical systems: a constructive approach. **(80d:93053)**
Dostál, Zdeněk Polynomials of the eigenvalues and powers of matrices. **(80a:65073)**
Kerr, T. H. Correction to: "An invalid norm appearing in control and estimation" (IEEE Trans. Automatic Control AC-23 (1978), no. 1, 73–74). **(80b:93022)**
Leinert, Michael Abschätzung von Normen gewisser Matrizen und eine Anwendung. **(80j:43004)**
Milićić, Pavle M. Sur la comparaison des normes d'opérateurs. **(80h:47009)**
Tong, Christopher H. *See* **Brayton, Robert K., (80d:93053)**

15A63 Quadratic and bilinear forms, inner products [See mainly 10Cxx.]

Atkinson, M. D. (*with* Stephens, N. M.) On the maximal multiplicative complexity of a family of bilinear forms. **80i:15019**
Fox, David W. The convexity of the range of three Hermitian forms and of the numerical range of sesquilinear forms. **80a:15026**
Gentile, Enzo R. (*with* Shapiro, Daniel B.) Conservative quadratic forms. **80a:15027**
Hahn, Alexander J. Unipotent elements and the spinor norms of Wall and Zassenhaus. **80d:15030**
Johnsen, Karsten Über orthogonale Zerlegungen metrischer G-Moduln. **80k:15037**
Kanzaki, Teruo Notes on Hermitian forms over a ring. **80j:15015**
Majindar, K. N. Linear combinations of Hermitian and real symmetric matrices. **80b:15033**

Mateos Mateos, Felipe Classification of congruent symmetric matrices defined over a finite field. (Spanish) **80b:15034**
Ojanguren, Manuel Formes quadratiques sur les algèbres de polynomes. (English summary) **80a:15028**
Paques, Antonio Sur la cohomologie des formes quadratiques. **80k:15038**
Shapiro, Daniel B. Similarities and isoclinic planes. **80a:15029**
Intersections of the space of skew-symmetric maps with its translates. **80b:15035**
See also **Gentile, Enzo R., 80a:15027**
Stephens, N. M. *See* **Atkinson, M. D., 80i:15019**
Uhlig, Frank A recurring theorem about pairs of quadratic forms and extensions: a survey. **80h:15015**
Bull. Soc. Math. France Mem. *See* **Colloque: Les Formes Quadratiques, 80h:15016**
Colloque:
Les Formes Quadratiques ★Colloque sur les Formes Quadratiques. 2. **80h:15016**
Montpellier *See* **Colloque: Les Formes Quadratiques, 80h:15016**
Quadratic forms *See* **Colloque: Les Formes Quadratiques, 80h:15016**

Secondary classifications:

Barza, Ricardo On the classification of quadratic forms over semilocal rings. **(80m:10018)**
Bäni, Werner Subspaces of positive definite inner product spaces of countable dimension. **(80i:10024)**
Blanco Martín, María Francisca (*with* Tena Ayuso, Juan) The kernel of the homomorphism $W(Q)\to W(Q(\sqrt{d}))$. (Spanish) **(80e:10021)**
Cassels, J. W. S. ★Rational quadratic forms. **(80m:10019)**
Craven, Thomas C. Characterizing reduced Witt rings. II. **(80i:10025)**
Gibbs, David E. Witt classes of integral representations of an abelian 2-group. **(80h:57062)**
Grigor'ev, D. Ju. The algebraic computational complexity of a family of bilinear forms. (Russian) **(80f:68046)**
Guin, Daniel K-théorie algébrique et invariants des formes quadratiques. **(80j:10028)**
Ja' Ja', Joseph Optimal evaluation of pairs of bilinear forms. **(80j:68032)**
Kaplansky, Irving Composition of quadratic and alternate forms. **(80e:10024)**
Knebusch, Manfred (*with* Kolster, Manfred) ★Wittringe. (English) **(80e:10022)**
Kolster, Manfred *See* **Knebusch, Manfred, (80e:10022)**
Lewis, D. W. Frobenius algebras and Hermitian forms. **(80h:10029)**
Marshall, Murray A. Classification of finite spaces of orderings. **(80i:10026)**
Neumann, Walter D. ★Equivariant Witt rings. **(80a:57010)**
Ono, Takashi (*with* Yamaguchi, Hiroyuki) On Hasse principle for division of quadratic forms. **(80e:10023)**
Prestel, Alexander Remarks on the Pythagoras and Hasse number of real fields. **(80d:12020)**
(*with* Ware, Roger) Almost isotropic quadratic forms. **(80e:12024)**
Probert, Robert L. An extension of computational duality to sequences of bilinear computations. **(80j:68028)**
Schröder, Eberhard M. Eine Kennzeichnung der regulären euklidischen Geometrien. **(80i:51019)**
Tena Ayuso, Juan *See* **Blanco Martín, María Francisca, (80e:10021)**
Ware, Roger *See* **Prestel, Alexander, (80e:12024)**
Yamaguchi, Hiroyuki *See* **Ono, Takashi, (80e:10023)**

15A66 Clifford algebras

Edwards, Bruce H. A note on Clifford algebra periodicity. **80a:15030**
Revoy, Philippe ★Autour des formes quadratiques. **80e:15018**
Stepanov, V. E. Clifford algebras and Dirac matrices in a tensor formulation. (Russian. English summary) **80i:15020**

Secondary classifications:

Ablamowicz, R. (*with* Mozrzymas, J.; Oziewicz, Z.; Rzewuski, Jan) Spinor space. **(80d:81031)**
Crumeyrolle, Albert Algèbres de Clifford symplectiques et revêtements spinoriels du groupe symplectique. **(80k:58050)**
Gudder, Stanley P. Algebraic conditions for a function on an abelian group. **(80i:81003)**
Jagannathan, R. Comments on some physical applications of generalised Clifford algebras. Problems of quantum canonical transformations, lattice dynamics and Bloch electrons in a homogeneous magnetic field. **(80c:81043)**
Kac, V. G. (*with* Vinberg, È. B.) Spinors of 13-dimensional space. **(80c:10022)**
Mozrzymas, J. *See* **Ablamowicz, R.; et al., (80d:81031)**
Ono, Takashi (*with* Yamaguchi, Hiroyuki) On Hasse principle for division of quadratic forms. **(80e:10023)**
Oziewicz, Z. *See* **Ablamowicz, R.; et al., (80d:81031)**
Plazzese, Franco Clifford formulation of classical field equations. (Italian summary) **(80h:81044)**
Rzewuski, Jan *See* **Ablamowicz, R.; et al., (80d:81031)**
Vinberg, È. B. *See* **Kac, V. G., (80c:10022)**
Yamaguchi, Hiroyuki *See* **Ono, Takashi, (80e:10023)**

15A69 Multilinear algebra, tensor products

Chan, Gin Hor A note on symmetrizers of rank one. **80c:15016**
(k)-characters and the triviality of symmetry classes. **80k:15039a**
(k)-characters and the triviality of symmetry classes. II. **80k:15039b**
Dias da Silva, J. A. Conditions for equality of decomposable symmetric tensors. **80e:15019**
See also **de Oliveira, G. N., 80m:15019**
Greub, Werner ★Multilinear algebra. **80c:15017**
Grigor'ev, D. Ju. On the rank of pairs of matrices and convolutions. (Russian) **80h:15017**
Grone, Robert The invariance of partial isometries. **80b:15036**
Henderson, Harold V. (*with* Searle, S. R.) Vec and vech operators for matrices, with some uses in Jacobians and multivariate statistics. (French summary) **80j:15016**
Kim, Jin Bai Note on the product of two tensor products of linear mappings. **80d:15031**
McFall, John D. Elementary divisors of transformations related to tensor powers. **80d:15032**
Merris, Russell Linearly independent permutation characters afforded by action on tensor spaces. **80c:15018**
Recent advances in symmetry classes of tensors. **80k:15040**
de Oliveira, G. N. (*with* Dias da Silva, J. A.) Conditions for equality of decomposable symmetric tensors. II. **80m:15019**
Ong, Hock Linear transformations on matrices: the invariance of generalised permutation matrices. II. **80h:15018**
Pierce, Stephen (*with* Watkins, William) Isometries of E_2. **80h:15019**
Searle, S. R. *See* **Henderson, Harold V., 80j:15016**
Watkins, William *See* **Pierce, Stephen, 80h:15019**

Secondary classifications:

Del Piero, Gianpietro Some properties of the set of fourth-order tensors, with application to elasticity. (Italian summary) **(80k:73003)**
Jotov, Ognjan On the group properties of some contractions. **(80k:53014)**
Samelson, Hans Note on the Lefschetz-Hodge operators. **(80j:58002)**

15A72 Vector and tensor algebra, theory of invariants

Borisenko, A. İ. (*with* Tarapov, I. E.) ★Vector and tensor analysis with applications. **80m:15020**
Chollet, John *See* **Marcus, Marvin, 80b:15037a**
Désarménien, J. Un contre-exemple pour les formes invariantes sur un corps fini. **80d:15033**
Èlašvili, A. G. *See* **Vinberg, È. B., 80b:15039**
Hadžiev, Dž. A problem from graph theory. (Russian) **80j:15017**
Lim, M. H. Linear transformations on symmetric matrices. **80f:15027**
Marcus, Marvin (*with* Chollet, John) Decomposable symmetrized tensors. **80b:15037a**
Decomposable symmetrized tensors and an extended LR decomposition theorem. **80b:15037b**
Merris, Russell The structure of higher degree symmetry classes of tensors. II. **80b:15038**
Procesi, Claudio Les bases de Hodge dans la théorie des invariants. (English summary) **80b:15020**
Positive symmetric functions. **80d:15034**
(Silverman, Richard A.) *See* **Borisenko, A. İ.; et al., 80m:15020**
Stanley, Richard P. Combinatorics and invariant theory. **80e:15020**
Tarapov, I. E. *See* **Borisenko, A. İ., 80m:15020**
Vinberg, È. B. (*with* Èlašvili, A. G.) A classification of the three-vectors of nine-dimensional space. (Russian) **80b:15039**

Secondary classifications:

Abeasis, Silvana (*with* Del Fra, Alberto) Characteristic classes through classical invariant theory. **(80a:57022)**
(Ackerman, Michael) *See* **Hilbert, David, (80e:01035)**
Almkvist, Gert The number of nonfree components in the decomposition of symmetric powers in characteristic p. **(80b:13009)**
Altman, Wolf *See* **de Oliveira, Antonio Marmo, (80a:53009)**
Bardsley, William G. (*with* Waight, Roy D.) Factorability of the Hessian of the binding polynomial. The central issue concerning statistical ratios between binding constants, Hill plot slope and positive and negative co-operativity. **(80a:92009)**
de Concini, Corrado Symplectic standard tableaux. **(80m:14036)**
Costa, Roberto (*with* Micali, Artibano) Sur les algèbres de Rees. II. (English summary) **(80a:13016)**
Del Fra, Alberto *See* **Abeasis, Silvana, (80a:57022)**
Flatto, Leopold Invariants of finite reflection groups. **(80j:14010)**
Green, A. E. (*with* Naghdi, P. M.) A note on invariance under superposed rigid body motions. **(80f:73007)**
Haris, Stephen J. Complete reducibility of admissible representations over function fields. **(80i:12012)**
(Hermann, Robert) *See* **Hilbert, David, (80e:01035)**
Hesselink, Wim The normality of closures of orbits in a Lie algebra. **(80g:14018)**
Hilbert, David ★Hilbert's invariant theory papers. **(80e:01035)**
Humphreys, J. E. Hilbert's fourteenth problem. **(80h:14021)**
Jędryka, Halina J. Some methodological ideas concerning chords, diameters and polar conics. (Polish) **(80a:51015)**
Kempf, George R. Instability in invariant theory. **(80c:20057)**
The Hochster-Roberts theorem of invariant theory. **(80g:14040)**
Kraft, Hanspeter (*with* Procesi, Claudio) Closures of conjugacy classes of matrices are normal. **(80m:14037)**
Lancaster, Glenn (*with* Towber, Jacob) Representation-functors and flag-algebras for the classical groups. I. **(80i:14020)**
Luna, D. (*with* Richardson, R. W.) A generalization of the Chevalley restriction theorem. **(80k:14049)**
Magseron, Bernard Structure des polynômes invariants sur l'algèbre de Lie d'un groupe symplectique inhomogène. (English summary) **(80b:22021)**
Micali, Artibano *See* **Costa, Roberto, (80a:13016)**
Naghdi, P. M. *See* **Green, A. E., (80f:73007)**
Nakajima, Haruhisa Invariants of reflection groups in positive characteristics. **(80i:14019)**
de Oliveira, Antonio Marmo (*with* Altman, Wolf) Coordinate transformations of physical components of tensors. **(80a:53009)**
Popov, V. L. A classification of spinors of dimension fourteen. (Russian) **(80b:20054)**

Procesi, Claudio *See* **Kraft, Hanspeter, (80m:14037)**
Revoy, Philippe Trivecteurs de rang 6. **(80k:15041)**
Richardson, R. W. *See* **Luna, D., (80k:14049)**
Schwarz, Gerald W. Representations of simple Lie groups with a free module of covariants. **(80c:14008)**
Representations of simple Lie groups with regular rings of invariants. **(80m:14032)**
Servedio, Frank J. Canonical reducible cubic forms in n (≥ 3)-variables and their infinite orthogonal groups. **(80h:10031a)**
Stepanov, V. E. Clifford algebras and Dirac matrices in a tensor formulation. (Russian. English summary) **(80i:15020)**
Towber, Jacob *See* **Lancaster, Glenn, (80f:14020)**
Vinberg, È. B. Classification of homogeneous nilpotent elements of a semisimple graded Lie algebra. (Russian) **(80k:17006)**
Vulpe, N. I. The number of linearly independent compacta of a system of differential equations. (Russian) **(80k:53023)**
Waight, Roy D. *See* **Bardsley, William G., (80a:92009)**

15A75 Exterior algebra, Grassmann algebras

Djoković, Dragomir Ž. Derivations and automorphisms of exterior algebras. **80a:15031**
Ghosh, N. N. Matrix representation of K-fold vectors of different classes defined over a linear n-space. **80g:15028**
Marcus, Marvin An inequality for non-decomposable elements in the Grassmann algebra. **80a:15032**
Revoy, Philippe Trivecteurs de rang 6. **80k:15041**
Soules, George W. An inequality in the Grassmann algebra. **80k:15042**
Westwick, R. Irreducible lengths of trivectors of rank seven and eight. **80h:15021**

Secondary classifications:

Ikushima, Akira *See* **Mimura, Fumitake, (80k:16030)**
Mimura, Fumitake (*with* Ikushima, Akira) Generalized Clifford groups. **(80k:16030)**
Procesi, Claudio Les bases de Hodge dans la théorie des invariants. (English summary) **(80k:15020)**

15A78 Other algebras built from modules

Diab, Vlastimil (*with* Ringel, Claus Michael) Real subspaces of a quaternion vector space. **80a:15033**
Ringel, Claus Michael *See* **Diab, Vlastimil, 80a:15033**

Secondary classifications:

Hadnagy, A. *See* **Izverceanu, P. N., (80k:15043)**
Izverceanu, P. N. (*with* Hadnagy, A.) Sur une classe des algèbres polynomiales. **(80k:15043)**
Knus, M.-A. Modules quadratiques sur un anneau de polynômes. **(80f:13013)**

15A90 Applications to physics

Secondary classifications:

Calogero, F. (*with* Perelomov, A. M.) Properties of certain matrices related to the equilibrium configuration of the one-dimensional many-body problems with the pair potentials $V_1(x) = -\log|\sin x|$ and $V_2(x) = 1/\sin^2 x$. **(80d:70019)**
Chiney, S. P. *See* **Karade, T. M., (80j:81027)**
Dresden, Max *See* **Salingaros, Nikos, (80d:81045)**
Karade, T. M. (*with* Chiney, S. P.) Rotations in space-time. **(80j:81027)**
Kruglov, S. I. (*with* Staražev, V. I.) Internal symmetry group in the quantum theory of a vector field of general type. (Russian) **(80j:81098)**
Novotny, Mark A. Matrix products with application to classical statistical mechanics. **(80d:82019)**
Perelomov, A. M. *See* **Calogero, F., (80d:70019)**
Pigozzi, Diego Kinematic geometric properties of precession motions. (Italian. English summary) **(80e:70008)**
Salingaros, Nikos (*with* Dresden, Max) Properties of an associative algebra of tensor fields. Duality and Dirac identities. **(80d:81045)**
Staražev, V. I. *See* **Kruglov, S. I., (80j:81098)**
Strnad, Janez The Lorentz transformation—graphically. (Slovenian) **(80k:83004)**

15A99 Miscellaneous topics

Kawashima, Genkichi Sur la para-nouvelle puissance. **80m:15021**
Tam, Bit Shun On indecomposable subcones. **80d:15035**

Secondary classifications:

Abian, Alexander (*with* Salbany, Sergio) Dyadic matrices and Wallman compactification. **(80k:15023)**
Babaev, È. A. Semiheaps of homomorphisms of linear spaces. (Russian. Azerbaijani and English summaries) **(80b:15020)**
Calogero, F. (*with* Perelomov, A. M.) Some Diophantine relations involving circular functions of rational angles. **(80d:15010)**
Foata, Dominique A matrix analog for Viennot's construction of the Robinson correspondence. **(80k:05011)**
Houck, David J. (*with* Pittenger, Arthur O.) Analytic proofs of a network feasibility theorem and a theorem of Fulkerson. **(80b:90056)**
(*with* Paul, Michael E.) On a theorem of de Bruijn and Erdős. **(80h:05013)**
Jasiulionis, A. A certain application of matrices in differential calculus and differential equations. (Russian. Lithuanian and English summaries) **(80f:26002)**
Kossow, Andreas Basen in einer speziellen Alegbra über einem endlichen Vektorraum. **(80f:15002)**
Marchi, Ezio (*with* Tarazaga, Pablo) About (k, n) stochastic matrices. **(80f:15026)**
Paul, Michael E. *See* **Houck, David J., (80h:05013)**
(Peirce, Benjamin) *See* **Pyclor, Helena M., (80j:01022)**
Perelomov, A. M. *See* **Calogero, F., (80d:15010)**
Pittenger, Arthur O. *See* **Houck, David J., (80b:90056)**
Pyclor, Helena M. Benjamin Peirce's *Linear associative algebra*. **(80j:01022)**
Salbany, Sergio *See* **Ablan, Alexander, (80k:15023)**
Shank, H. S. The rational case of a matrix problem of Harrison. **(80k:15022)**
Stoyle, P. N. R. *See* **Vardulakis, A. I. G., (80e:12025)**
Tarazaga, Pablo *See* **Marchi, Ezio, (80f:15026)**
Vardulakis, A. I. G. (*with* Stoyle, P. N. R.) Generalized resultant theorem. **(80e:12025)**

16–XX ASSOCIATIVE RINGS AND ALGEBRAS {For the commutative case, see 13–XX.}

16–01 Elementary exposition, textbooks

Secondary classifications:

Fischer, Gerd (*with* Sacher, Reinhard) ★Einführung in die Algebra. **(80c:00002)**
Sacher, Reinhard *See* **Fischer, Gerd, (80c:00002)**

16–02 Advanced exposition (research surveys, monographs, etc.)

Andrunakievič, V. A. (*with* Arnautov, V. I.) Associative rings. (Russian) **80k:16001**
Arnautov, V. I. *See* **Andrunakievič, V. A., 80k:16001**
Bokut', L. A. Some questions in the theory of rings. (Russian) **80c:16001**
Năstăsescu, Constantin (*with* van Oystaeyen, F.) ★Graded and filtered rings and modules. **80k:16002**
van Oystaeyen, F. *See* **Năstăsescu, Constantin, 80k:16002**
(Rédei, L.) *See* **Steinfeld, Ottó, 80e:16001**
Sehgal, Sudarshan K. ★Topics in group rings. **80j:16001**
Steinfeld, Ottó ★Quasi-ideals in rings and semigroups. **80e:16001**
Problems:
Module theory Problems. **80k:16003**

Secondary classifications:

Jacobson, Nathan Some recent developments in the theory of algebras with polynomial identities. **(80j:16013)**

16–03 Historical (must also be assigned at least one classification number from Section 01)

16–04 Explicit machine computation and programs (not the theory of computation or programming)

16–06 Proceedings, conferences, etc.

(Andrunakievič, V. A.) *See* **Ring-theoretic constructions, 80f:16001**
(Faith, Carl) *See* **Module theory, 80h:16001**
(Handelman, David) *See* **Ring theory, 80g:16001**
(Lawrence, John) *See* **Ring theory, 80g:16001**
(Nikol'skiĭ, S. M.) *See* **Algebra, number theory and their applications, 80k:16004**
(van Oystaeyen, F.) *See* **Ring theory, 80a:16001** *and* **Ring theory, 80m:16001**
(Wiegand, Sylvia) *See* **Module theory, 80h:16001**
Algebra, number theory and their applications ★Алгебра, теория чисел и их приложения. (Russian) [Algebra, number theory and their applications] **80k:16004**
Antwerp *See* **Ring theory, 80a:16001** *and* **Ring theory, 80m:16001**
Conference:
Ring Theory *See* **Ring theory, 80a:16001; Ring theory, 80g:16001** *and* **Ring theory, 80m:16001**
Module theory ★Module theory. **80h:16001**
NATO Advanced Study Institute:
Ring theory *See* **Ring theory, 80m:16001**
Number theory *See* **Algebra, number theory and their applications, 80k:16004**
Ring-theoretic constructions ★Теоретико-кольцевые конструкции. (Russian) [Ring-theoretic constructions] **80f:16001**
Ring theory ★Ring theory. **80a:16001**
★Ring theory, Waterloo 1978. **80g:16001**
★Ring theory. **80m:16001**
Seattle, Wash. *See* **Module theory, 80h:16001**
Session:
Module Theory *See* **Module theory, 80h:16001**
Waterloo, Ont. *See* **Ring theory, 80g:16001**

Secondary classifications:

(Gamkrelidze, R. V.) *See* **Algebra, Topology, Geometry, (80h:00001)**
(Malliavin-Brameret, Marie-Paule) *See* **Séminaire: Algèbre Paul Dubreil, (80m:13001)**
Algebra *See* **Séminaire: Algèbre Paul Dubreil, (80m:13001)**
Algebra, Topology, Geometry ★Алгебра. Топология. Геометрия. Том 16. (Russian) [Algebra. Topology. Geometry. Vol. 16] **(80h:00001)**
Geometry *See* **Algebra, Topology, Geometry, (80h:00001)**
Itogi Nauki i Tehniki *See* **Algebra, Topology, Geometry, (80h:00001)**
Paris *See* **Séminaire: Algèbre Paul Dubreil, (80m:13001)**
Séminaire:
Dubreil, P. *See* **Séminaire: Algèbre Paul Dubreil, (80m:13001)**

Algèbre Paul Dubreil ★Séminaire d'Algèbre Paul Dubreil, 31ème année. **(80m:13001)**
Topology *See* **Algebra, Topology, Geometry, (80h:00001)**

16A02 Integral domains, unique factorization domains (noncommutative)

Achkar, Habib Anneaux arithmétiques à gauche: propriétés de transfert. (English summary) **80c:16002**

Secondary classifications:

Ebanks, Bruce R. On some functional equations of Jessen, Karpf, and Thorup. **(80k:39002)**

16A03 Graded algebras, rings and modules

Body, Richard (*with* Douglas, Roy) Tensor products of graded algebras and unique factorization. **80h:16002**
Douglas, Roy *See* **Body, Richard, 80h:16002**
van Oystaeyen, F. Graded and non-graded birational extensions. **80b:16001**
Strömbeck, Peter On left ideals in A_1 and their associated graded ideals. **80f:16002**
Zöschinger, Helmut Quasiseparable und koseparable Moduln über diskreten Bewertungsringen. **80j:16002**

Secondary classifications:

Anderson, D. D. (*with* Matijevic, J.) Graded π-rings. **(80h:13023)**
Coffee, Jane Purcell On the rigidity of graded algebras. **(80f:16031)**
Johnson, Jon L. The graded ring $R[X_1, \cdots, X_n]$. **(80f:13012)**
Lu, Chin Pi Purity of linearly topological rings in overrings. **(80i:13009)**
Matijevic, J. *See* **Anderson, D. D., (80h:13023)**
Rossi, Maria Evelina Height and dimension of a graded ring associated with an ideal. (Italian. English summary) **(80d:13004)**

16A04 Noncommutative principal ideal rings, rings with a division algorithm

Cohn, P. M. Correction to: "A construction of simple principal right ideal domains" [Proc. Amer. Math. Soc. **66** (1977), no. 2, 217–222; MR **56** #12058]. **80i:16001**
Tuganbaev, A. A. Characterizations of rings using poorly injective and poorly projective modules. (Russian. English summary) **80m:16002**
Widiger, Alfred Die Ringe, deren sämtliche Unterringe Hauptrechtsidealringe sind. **80a:16002**

16A05 Skew polynomial rings, power series rings

Bergman, George M. Conjugates and nth roots in Hahn-Laurent group rings. **80a:16003**
Cohn, Harvey Cyclic-sixteen class fields for $\mathbf{Q}((-p)^{1/2})$ by modular arithmetic. **80h:12007**
Haghany, A. Reflexive modules over certain differential polynomial rings. **80e:16002**
Ikehata, Shôichi On a theorem of Y. Miyashita. **80i:16002**
Irving, Ronald S. Prime ideals of Ore extensions over commutative rings. **80m:16003**
Prime ideals of Ore extensions over commutative rings. II. **80m:16004**
On the primitivity of certain Ore extensions. **80i:16003**
Jordan, D. A. Primitive skew Laurent polynomial rings. **80b:16002**
Lorenz, Martin The heart of prime ideals in Ore extensions. **80i:16004**
Miyashita, Yôichi On a skew polynomial ring. **80f:16003**
Niyogi, Sila On some special type of mappings of formal power series ring. **80h:16003a**
Errata: "On some special type of mappings of formal power series ring" [Bull. Calcutta Math. Soc. **69** (1977), no. 4, 219–224; MR 80h:16003a]. **80h:16003b**
Risman, Lawrence J. Group rings and series. **80b:16003**

Secondary classifications:

Bojarkin, A. A. Algebras that can be deformed into free algebras. (Russian) **(80d:16001)**
Cohn, P. M. Centralisateurs dans les corps libres. **(80f:16004)**
Dixon, P. G. Scalar homomorphisms on algebras of infinitely long polynomials with an application to automatic continuity theory. **(80h:46074)**
El Ahmar, A. Sur la noethérianité de $A[X, \sigma, \delta]$ lorsque A est commutatif artinien. **(80f:13011)**

16A06 Free algebras, free ideal rings (firs) and their generalizations [See also tensor algebra in 15A72.]

Bojarkin, A. A. Algebras that can be deformed into free algebras. (Russian) **80d:16001**
Čekanu, G. P. Distinguished varieties of associative algebras. (Russian) **80j:16003**
Cohn, P. M. Centralisateurs dans les corps libres. **80f:16004**
Dicks, Warren (*with* Menal, Pere) The group rings that are semifirs. **80g:16002**
Harčenko, V. K. Algebras of invariants of free algebras. (Russian) **80e:16003**
Irving, Ronald S. Rings with subexponential growth and irreducible representations. **80d:16002**
Jooste, Theofilus de W. Primitive derivations in free associative algebras. **80a:16004**
Lichtman, A. I. The primitivity of free products of associative algebras. **80g:16003**
Malcolmson, Peter A prime matrix ideal yields a skew field. **80d:16003**
Menal, Pere *See* **Dicks, Warren, 80g:16002**
Tarasov, B. V. Subalgebras of a free associative algebra. (Russian) **80k:16005**
Williams, R. E. Errata to: "A note on rings with a weak algorithm" (Bull. Amer. Math. Soc. **75** (1969), 959–961). **80c:16003**
Wong, Roman W. Finitely generated ideals in free group algebras. **80j:16004**

Secondary classifications:

Harčenko, V. K. A remark on central polynomials. (Russian) **(80i:16024)**

16A08 Rings of quotients, noncommutative localization

Bate, James A. *See* **Luedeman, John K., 80j:16005**
Beachy, John A. Injective modules with both ascending and descending chain conditions on annihilators. **80b:16004**
Beĭdar, K. I. Quotient rings of semiprime rings. (Russian. English summary) **80a:16005**
Dinh Van Huynh (*with* Widiger, Alfred) Über Ringe mit eingeschränkter Minimalbedingung höherer Stufe für Unterringe. **80f:16005**
Fleury, Patrick On a class of idealizers. **80g:16004**
Fuelberth, John (*with* Kuzmanovich, James J.) On the structure of finitely generated splitting rings. **80f:16006**
Kato, Toyonori Duality between colocalization and localization. **80i:16005**
Krause, Günter (*with* Lenagan, T. H.; Stafford, J. T.) Ideal invariance and Artinian quotient rings. **80f:16007**
Kuzmanovich, James J. *See* **Fuelberth, John, 80f:16006**
Lai, C. C. Localization in non-Noetherian rings. **80m:16005**
Lenagan, T. H. *See* **Krause, Günter; et al., 80f:16007**
Luedeman, John K. (*with* Bate, James A.) The ring of quotients of $R(S)$. **80j:16005**
Masaike, Kanzo Endomorphisms of modules over maximal orders. **80i:16006**
Müller, Bruno J. Twosided quotient rings for Noetherian pi-rings. **80b:16005**
Ideal invariance and localization. **80i:16007**
van Oystaeyen, F. On graded rings and modules of quotients. **80a:16006**
Ring theory ∩ torsion theory = useful localization. **80a:16007**
(*with* Verschoren, A.) Relative localization; bimodules and semiprime P.I. rings. **80c:16004**
Stafford, J. T. *See* **Krause, Günter; et al., 80f:16007**
Upham, Mary H. Localization and completion of FBN hereditary rings. **80i:16008**
Verschoren, A. *See* **van Oystaeyen, F., 80c:16004**
Widiger, Alfred *See* **Dinh Van Huynh, 80f:16005**
Zelmanowitz, Julius M. Semisimple rings of quotients. **80a:16008**

Secondary classifications:

Brown, Kenneth A. Quotient rings of group rings. **(80i:16018)**
Eckstein, Frank Orders in locally pro-Artinian rings. **(80h:16004)**
Evans, M. W. Extended semihereditary rings. **(80e:16006)**
van Geel, J. Primes in rings and their extensions to algebras over rings. **(80e:16021)**
Hansen, Friedhelm Ringerweiterung und Lokalisation. **(80f:16029)**
Irving, Ronald S. On the primitivity of certain Ore extensions. **(80i:16003)**
Jøndrup, Søren Rings of quotients of some semiprime P.I. rings. **(80b:16012)**
Malcolmson, Peter A prime matrix ideal yields a skew field. **(80d:16003)**
Nauwelaerts, E. Symmetric localisation of Asano orders. **(80c:16005)**
Nghiêm Xuân Hai ★Algèbres de Heisenberg et géométrie symplectique des algèbres de Lie. **(80g:17005)**
van Oystaeyen, F. Graded and non-graded birational extensions. **(80b:16001)**
Raynaud, J. Localisations premières et copremières. Localisations stables par enveloppes injectives. **(80c:16026)**
Resco, Richard (*with* Small, Lance W.; Wadsworth, Adrian R.) Tensor products of division rings and finite generation of subfields. **(80g:16020)**
Small, Lance W. *See* **Resco, Richard; et al., (80g:16020)**
Wadsworth, Adrian R. *See* **Resco, Richard; et al., (80g:16020)**

16A10 Noncommutative local rings

Brungs, H. H. (*with* Törner, Günter) Embedding right chain rings in chain rings. **80a:16009**
Törner, Günter *See* **Brungs, H. H., 80a:16009**
Vidal, Robert Anneaux de Cohen, non commutatifs, sur un corps local. (English summary) **80e:16005**

16A12 Prime and semiprime rings

Ansari, A. H. *See* **Khan, Mohammad Zubair, 80a:16010**
Baxter, W. E. (*with* Martindale, W. S., III) Jordan homomorphisms of semiprime rings. **80f:16008**
Herstein, I. N. Center-like elements in prime rings. **80m:16006**
Khan, Mohammad Zubair (*with* Ansari, A. H.) On a generalization of a theorem of P. Hill. **80a:16010**
Lanski, Charles (*with* Resco, Richard; Small, Lance W.) On the primitivity of prime rings. **80i:16009**
Martindale, W. S., III *See* **Baxter, W. E., 80f:16008**
Ray, Baruda K. Remarks on some theorems of Feller and Swokowski. **80a:16011**
Resco, Richard *See* **Lanski, Charles; et al., 80i:16009**
Richards, Ron Noetherian prime rings of Krull dimension one. **80c:16004**
Richoux, Anthony N. A theorem for prime rings. **80f:16009**
Small, Lance W. *See* **Lanski, Charles; et al., 80i:16009**
Szeto, George p.p. rings and reduced rings. **80b:16006**
Zel'manov, E. I. An example of a finitely generated primary ring. (Russian) **80i:16010**

Secondary classifications:

Beĭdar, K. I. Quotient rings of semiprime rings. (Russian. English summary) **(80a:16005)**
Chacron, M. A commutativity theorem for rings with involution. **(80a:16023)**
Fuelberth, John (*with* Kuzmanovich, James J.) On the structure of finitely generated splitting rings. **(80f:16006)**
Ikehata, Shôichi Note on the n-center of an algebra. **(80m:16012)**
Joseph, Anthony (*with* Small, Lance W.) An additivity principle for Goldie rank. **(80j:17005)**

Kuzmanovich, James J. *See* **Fuelberth, John, (80f:16006)**
Lanski, Charles Lie structure in semiprime rings with involution. II. **(80k:16042)**
Montgomery, Susan (*with* Passman, D. S.) Crossed products over prime rings. **(80a:16022)**
Passman, D. S. Crossed products over semiprime rings. **(80d:16010)**
See also **Montgomery, Susan, (80a:16022)**
Rowen, Louis Halle Correction to: "Monomial conditions on prime rings" (Israel J. Math. **27** (1977), no. 2, 131–149). **(80b:16013)**
Small, Lance W. *See* **Joseph, Anthony, (80j:17005)**
Tuganbaev, A. A. Pseudoinjective modules and extension of automorphisms. (Russian) **(80g:16028)**

16A14 Noncommutative analogues of Dedekind and Prüfer domains

Dellfer, Jean-Baptiste Anneaux de Krull non commutatifs de Marubayashi. (English summary) **80f:16010**
Evans, M. W. Extended semihereditary rings. **80e:16006**
Fuelberth, John (*with* Kirkman, Ellen E.; Kuzmanovich, James J.) Hereditary module-finite algebras. **80k:16006**
Goodearl, K. R. (*with* Warfield, Robert B., Jr.) Simple modules over hereditary Noetherian prime rings. **80g:16005**
Khan, Mohammad Zubair Modules over bounded hereditary Noetherian prime rings. **80g:16006**
Kirkman, Ellen E. *See* **Fuelberth, John; et al., 80k:16006**
Kuzmanovich, James J. *See* **Fuelberth, John; et al., 80k:16006**
Miller, Dale D. Semihereditary prime algebras. **80b:16007**
Singh, Surjeet (*with* Talwar, Sudha) Modules over bounded hereditary Noetherian prime rings. **80g:16008**
Some decomposition theorems on abelian groups and their generalisations. II. **80g:16007**
Talwar, Sudha *See* **Singh, Surjeet, 80g:16008**
Ukegawa, Takasaburo Some properties of non-commutative multiplication rings. **80a:16012**
Upham, Mary H. A new proof of a theorem of Michler. **80k:16007**
Warfield, Robert B., Jr. *See* **Goodearl, K. R., 80g:16005**

Secondary classifications:

Mohammad, Asrar Rings whose proper homomorphic images are left q-rings. **(80k:16035)**
Tuganbaev, A. A. Pseudoinjective modules and extension of automorphisms. (Russian) **(80g:16028)**

16A15 Other generalizations of commutative rings (For commutativity theorems, see 16A70.)

Gojan, I. M. (*with* Kitoroagă, I. D.) Closure of ideals and primary expansions. (Russian) **80k:16008**
Kitoroagă, I. D. *See* **Gojan, I. M., 80k:16008**

Secondary classifications:

Humpert, W. Ringe mit dichtem Rechtsquasizentrum. **(80g:16037)**

16A16 Separable algebras, Azumaya algebras and their generalizations [See also 12Gxx, 13A20.]

Halle, Darrell E. On central simple algebras of given exponent. **80i:16011**
Heuser, Ansgar Über den Funktionenkörper der Normfläche einer zentral einfachen Algebra. **80k:16009**
Saltman, David J. Azumaya algebras with involution. **80a:16013**
Snider, Robert L. Is the Brauer group generated by cyclic algebras? **80k:16010**
Wisbauer, Robert Separable Moduln von Algebren über Ringen. **80a:16014**

Secondary classifications:

Georgantas, George T. Derivations in central separable algebras. **(80b:16027)**
Hattori, Akira On groups $H^n(S/R)$ related to the Amitsur cohomology and the Brauer group of commutative rings. **(80b:13003)**
Ikehata, Shôichi Note on the n-center of an algebra. **(80m:16012)**
Irving, Ronald S. Rings with subexponential growth and irreducible representations. **(80d:16002)**
Miyashita, Yôichi On a skew polynomial ring. **(80f:16003)**
Treger, Robert On p-torsion in etale cohomology and in the Brauer group. **(80k:14032)**

16A18 Orders, arithmetic in algebras [See also 12A80, 12B35.]

Chamarie, Marc ★Sur les ordres maximaux au sens d'Asano. **80k:16011**
Chatters, A. W. A note on Noetherian orders in Artinian rings. **80g:16009**
Drozd, Ju. A. (*with* Turčin, V. M.) Locally conjugate orders. (Russian) **80e:16007**
Dubrovin, N. I. Maximal orders in a simple central finite-dimensional algebra over a rank 1 valuation ring. (Russian) **80k:16012**
Eckstein, Frank Orders in locally pro-Artinian rings. **80h:16004**
Kirkman, Ellen E. (*with* Kuzmanovich, James J.) Orders over hereditary rings. **80d:16004**
Kuzmanovich, James J. *See* **Kirkman, Ellen E., 80d:16004**
Nauwelaerts, E. Symmetric localisation of Asano orders. **80c:16005**
Reiner, Irving Integral representations: genus, K-theory and class groups. **80b:16008**
Roggenkamp, Klaus W. Orders of global dimension two. **80i:16012**
Turčin, V. M. *See* **Drozd, Ju. A., 80e:16007**

Secondary classifications:

Achkar, Habib Anneaux arithmétiques à gauche: propriétés de transfert. (English summary) **(80c:16002)**
Bergman, George M. Conjugates and nth roots in Hahn-Laurent group rings. **(80a:16003)**
Gubareni, N. M. *See* **Sin'kov, M. V., (80j:10001)**
Kuku, Aderemi O. SG_n of orders and group-rings. **(80b:16020)**
(Puhov, G. È.) *See* **Sin'kov, M. V.; et al., (80j:10001)**
Roggenkamp, Klaus W. Erratum: "The construction of almost split sequences for integral group rings and orders" (Comm. Algebra **5** (1977), no. 13, 1363–1373). **(80b:16021)**
Sin'kov, M. V. (*with* Gubareni, N. M.) ★Непозиционные представления в многомерных числовых системах. (Russian) [Nonpositional representations in multidimensional number systems] **(80j:10001)**
Williams, Julian S. Trace ideals of relation modules of finite groups. **(80b:20004)**

16A19 Simple non-Artinian rings

Abbasov, N. T. Automorphisms and anti-automorphisms of biquasisimple algebras. (Russian. Azerbaijani summary) **80j:16006**
Stafford, J. T. Morita equivalence of simple Noetherian rings. **80f:16011**

Secondary classifications:

Chuang, C. L. (*with* Lee, P. H.) Idempotents in simple rings. **(80b:16013)**
Cohn, P. M. Correction to: "A construction of simple principal right ideal domains" [Proc. Amer. Math. Soc. **66** (1977), no. 2, 217–222; MR **56** #12058]. **(80i:16001)**
Lee, P. H. *See* **Chuang, C. L., (80b:16013)**
Osterburg, James Fixed rings of simple rings. **(80g:16041)**
Quebbemann, Heinz-Georg Schiefkörper als Endomorphismenringe einfacher Moduln über einer Weyl-Algebra. **(80i:16026)**
Resco, Richard Transcendental division algebras and simple Noetherian rings. **(80i:16027)**

16A20 Primitive and semiprimitive rings

Kezlan, Thomas P. On K-primitive rings. **80f:16012**
Khazal, Reyadh R. Multiplicative periodicity in rings. **80f:16013**

Secondary classifications:

Irving, Ronald S. On the primitivity of certain Ore extensions. **(80i:16003)**
Lanski, Charles (*with* Resco, Richard; Small, Lance W.) On the primitivity of prime rings. **(80i:16009)**
Resco, Richard Transcendental division algebras and simple Noetherian rings. **(80i:16027)**
See also **Lanski, Charles; et al., (80i:16009)**
Small, Lance W. *See* **Lanski, Charles; et al., (80i:16009)**

16A21 Radical theory

Andrunakievič, A. V. Special modules and special radicals. (Russian) **80i:16013**
Andrunakievič, V. A. (*with* Kračilov, K. K.; Rjabuhin, Ju. M.) Lattice-complemented torsion in algebras over a Noetherian integral domain. (Russian) **80h:16005**
(*with* Kračilov, K. K.; Rjabuhin, Ju. M.) Lattice-complementary torsions in algebras over a Noetherian integral domain. (Russian) **80i:16014**
Heyman, G. A. P. (*with* le Roux, H. J.) On the characterizations of certain radical classes. **80j:16007**
Kračilov, K. K. Complementation in a lattice of hypernilpotent radicals. I. (Russian) **80k:16013**
See also **Andrunakievič, V. A.; et al., 80h:16005** *and* **Andrunakievič, V. A.; et al, 80i:16014**
Krause, Günter (*with* Lenagan, T. H.) Transfinite powers of the Jacobson radical. **80j:16008**
Kyuno, Shoji Coincidence of the right Jacobson radical and the left Jacobson radical in a gamma ring. **80i:16015**
van Leeuwen, L. C. A. Upper radical constructions for associative rings. **80h:16006**
(*with* Wiegandt, Richard) Constructions and compositions of radical and semisimple classes. **80f:16014**
Lenagan, T. H. *See* **Krause, Günter, 80j:16008**
Nicholson, W. K. (*with* Watters, J. F.) Normal radicals and normal classes of rings. **80h:16007**
Rjabuhin, Ju. M. *See* **Andrunakievič, V. A.; et al., 80h:16005** *and* **Andrunakievič, V. A.; et al., 80i:16014**
de la Rosa, B. On a refinement in the classification of the nil rings. **80d:16005**
le Roux, H. J. *See* **Heyman, G. A. P., 80j:16007**
Watters, J. F. *See* **Nicholson, W. K., 80h:16007**
Widiger, Alfred Lattices of radicals for hereditarily Artinian rings. **80a:16015**
Wiegandt, Richard Correction and remark to my paper: "Characterizations of the Baer radical class by almost nilpotent rings" [Publ. Math. Debrecen **23** (1976), no. 1-2, 15–17; MR **54** #2715]. **80k:16014**
See also **van Leeuwen, L. C. A., 80f:16014**

Secondary classifications:

Choudhary, S. C. (*with* Tewari, K.) (NB)-property in near-rings. **(80f:16037)**
Tewari, K. *See* **Choudhary, S. C., (80f:16037)**
Tsushima, Yukio Some notes on the radical of a finite group ring. **(80b:20010)**
Zaharova, E. N. Radically semisimple classes and strong $\S$-semisimplicity of locally finite PI-algebras. (Russian) **(80k:16024)**

16A22 Nil, nilpotent and radical rings

Buzeţeanu, S. (*with* Niţă, C.) Sur les nil sous-anneaux. **80k:16015**
Duncan, J. (*with* Macdonald, I. D.) Some factorable nil rings of characteristic two. **80e:16008**
Feigelstock, Shalom Rings in which a power of each element is an integral multiple of the element. **80i:16016**
Ferrero Cotti, C. (*with* Manara Pellegrini, Silvia) Rings whose proper quotients are nilpotent. (Italian. English summary) **80c:16006**
Hué, Tran Trong (*with* Szász, Ferenc Andor) A sufficient covering condition for a left duo ring to be nilpotent. **80m:16007**
Macdonald, I. D. *See* **Duncan, J., 80e:16008**
Manara Pellegrini, Silvia *See* **Ferrero Cotti, C., 80c:16006**
Niţă, C. *See* **Buzeţeanu, S., 80k:16015**
Szász, Ferenc Andor *See* **Hué, Tran Trong, 80m:16007**

Secondary classifications:

Krause, Günter (*with* Lenagan, T. H.) Transfinite powers of the Jacobson radical. **80j:16008**
Lenagan, T. H. *See* **Krause, Günter, 80j:16008**
Putcha, Mohan S. (*with* Yaqub, Adil) Rings with a finite set of nonnilpotents. **80b:16014**
Rose, Bruce I. The $\aleph_1$-categoricity of strictly upper triangular matrix rings over algebraically closed fields. **80d:03031**
Stratton, A. E. (*with* Webb, M. C.) Type sets and nilpotent multiplications. **80h:20073**
Webb, M. C. *See* **Stratton, A. E., 80h:20073**
Wiegandt, Richard Correction and remark to my paper: "Characterizations of the Baer radical class by almost nilpotent rings" [Publ. Math. Debrecen **23** (1976), no. 1-2, 15–17; MR **54** #2715]. **80k:16014**
Yaqub, Adil *See* **Putcha, Mohan S., 80b:16014**

16A24 Hopf algebras, algebraic theory [See also 57T05.]

Allen, H. P. (*with* Trushin, D.) Coproper coalgebras. **80a:16016**
Berkson, Astrid J. (*with* Newman, Kenneth) Constructing sequences of divided powers. II. **80c:16007**
Kiełpiński, R. On homological dimensions of cocommutative Hopf algebras. **80f:16015**
Kikuchi, Teppei Some remarks on purely inseparable algebras. **80c:16008**
Miyamoto, Haruo *See* **Shudo, Takefumi, 80a:16018**
Newman, Kenneth (*with* Radford, David E.) The cofree irreducible Hopf algebra on an algebra. **80i:16017**
See also **Berkson, Astrid J., 80c:16007**
Nichols, Warren D. Quotients of Hopf algebras. **80a:16017**
Pointed irreducible bialgebras. **80g:16010**
Radford, David E. Embedding commutative irreducible Hopf algebras into cofree irreducible Hopf algebras. **80m:16008**
A natural ring basis for the shuffle algebra and an application to group schemes. **80k:16016**
See also **Newman, Kenneth, 80i:16017**
Shudo, Takefumi (*with* Miyamoto, Haruo) On the decomposition of coalgebras. **80a:16018**
Simson, Daniel (*with* Skowroński, A.) On the category of commutative connected graded Hopf algebras over a perfect field. **80a:16019**
Skowroński, A. *See* **Simson, Daniel, 80a:16019**
Trushin, D. *See* **Allen, H. P., 80a:16016**
Yanagihara, Hiroshi On isomorphism theorems of formal groups. **80g:16011**

Secondary classifications:

Douglas, Roy The uniqueness of coproduct decompositions for algebras over a field. **80k:55041**
Ligon, Thomas S. La théorie de Galois dans les catégories monoïdales. (English summary) **80d:18009**
Nakajima, Atsushi The monoid structure of Galois H-dimodule algebras induced by the smash product. **80c:16031**
Radford, David E. When pro-affine monoid schemes are group schemes. **80d:14025**
Sullivan, John Brendan The representative functions on the hyperalgebra. **80m:14029**
Takeuchi, Mitsuhiro Formal groups and Hopf algebras. (Japanese) **80k:14048**
Yanagihara, Hiroshi On group-theoretic properties of cocommutative Hopf algebras. **80g:14038**

16A25 Structure of groups of units of rings

Polcino Milies, César Certain properties of the group of units of a group ring. **80d:16006**
Zassenhaus, Hans When is the unit group of a Dedekind order solvable? **80c:16009**

16A26 Group rings of finite groups [See also 20C05; for semigroup rings, see 20M25.]

Atkinson, M. D. The complexity of group algebra computations. **80a:16020**
Bedi, Surinder Singh The Jacobson radical of the group algebra of a finite group. **80d:16007**
Brown, Kenneth A. Quotient rings of group rings. **80i:16018**
Primary decomposition in group algebras. **80f:16016**
Kondo, Shoichi Zero-divisors of character rings of finite groups. **80g:16012**
Koshitani, Shigeo Remarks on the commutativity of the radicals of group algebras. **80d:16008**
Krempa, Jan (*with* Sierpińska, Anna) The Jacobson radical of certain group and semigroup rings. (Russian summary) **80e:16009**
Menal, Pere Anneaux de groupe principaux à droite. (English summary) **80f:16017**
Osterburg, James The coefficient ring of the skew group ring. **80g:16013**
Park, Jae Keol Artinian skew group rings. **80d:16009**
Parmenter, M. M. (*with* Polcino Milies, César) Isomorphic group rings of direct products. **80e:16010**
Polcino Milies, César *See* **Parmenter, M. M., 80e:16010**
Roseblade, J. E. (*with* Smith, Patrick F.) A note on the Artin-Rees property of certain polycyclic group algebras. **80h:16008**
Sierpińska, Anna *See* **Krempa, Jan, 80e:16009**
Smith, Patrick F. *See* **Roseblade, J. E., 80h:16008**
Szeto, George On separable extensions of group rings and quaternion rings. **80e:16010**
Tan, Keng Teh A note on semiprimary group rings. **80k:16009**
Žučin, A. V. Local crossed products of a ring and a group. (Russian) **80a:16021**

Secondary classifications:

Baer, Reinhold The embedding relation derived from a formation. **80h:20030**
Dicks, Warren (*with* Menal, Pere) The group rings that are semifirs. **80g:16002**
Losey, Gerald (*with* Losey, Nora) The stable behavior of the augmentation quotients of the groups of order p^3. **80j:20007**
Losey, Nora *See* **Losey, Gerald, 80j:20007**
Menal, Pere *See* **Dicks, Warren, 80g:16002**
Montgomery, Susan Outer automorphisms of semi-prime rings. **80b:16028**
Ramakotaiah, D. (*with* Santhakumari, C.) On loop near-rings. **80g:16046a**
Robinson, Raphael M. Multiple tilings of n-dimensional space by unit cubes. **80g:05027**
Roggenkamp, Klaus W. Erratum: "The construction of almost split sequences for integral group rings and orders" (Comm. Algebra **5** (1977), no. 13, 1363–1373). **80b:16021**
Santhakumari, C. *See* **Ramakotaiah, D., 80g:16046a**

16A27 Group rings of infinite groups [See also 20C07; for semigroup rings, see 20M25.]

Chae, Younki (*with* Park, Kwang Sung) The singular ideals and Goldie dimensions of group rings. **80g:16014**
Dicks, Warren Hereditary group rings. **80k:16017**
Irving, Ronald S. Some primitive group rings. **80g:16015**
Menal, Pere Group rings in which every left ideal is a right ideal. **80m:16009**
Montgomery, Susan (*with* Passman, D. S.) Crossed products over prime rings. **80a:16022**
Park, Kwang Sung *See* **Chae, Younki, 80g:16014**
Passman, D. S. Crossed products over semiprime rings. **80d:16010**
See also **Montgomery, Susan, 80a:16022**
Smith, Patrick F. The AR property and chain conditions in group rings. **80k:16010**
Stafford, J. T. K-theory of Noetherian group rings. **80k:16018**

Secondary classifications:

Lorenz, Martin (*with* Passman, D. S.) Centers and prime ideals in group algebras of polycyclic-by-finite groups. **80f:20005**
Passi, Inder Bir S. The associated graded ring of a group ring. **80k:20008**
Passman, D. S. *See* **Lorenz, Martin, 80f:20005**
Polcino Milies, César Certain properties of the group of units of a group ring. **80d:16006**
Polcino Milies, Francisco César Group rings whose units form an FC-group. **80f:20006a**
Corrigendum: "Group rings whose units form an FC-group" (Arch. Math. (Basel) **30** (1978), no. 4, 380–384). **80f:20006b**
Sehgal, Sudarshan K. ★Topics in group rings. **80j:16001**
Williamson, Alan On the conjugacy classes in an integral group ring. **80e:20005**
Žučin, A. V. Local crossed products of a ring and a group. (Russian) **80a:16021**

16A28 Rings with involution [See also 46Kxx.]

Baxter, W. E. (*with* Casciotti, L. A.) A condition of Brauer-Cartan-Hua type. II. **80d:16011**
Casciotti, L. A. *See* **Baxter, W. E., 80d:16011**
Chacron, M. A commutativity theorem for rings with involution. **80a:16023**
Lanski, Charles Gabriel dimension and rings with involution. **80a:16025**
Chain conditions in rings with involution. II. **80a:16024**
Unitary invariance in algebraic algebras. **80j:16009**
Correction to: "Invariant submodules in semi-prime rings with involution" (Comm. Algebra **6** (1978), no. 1, 75–96). **80b:16009**
Piebiński, Jerzy F. The algebra generated by Hodge's star and external differential. **80g:16016**

Secondary classifications:

Amitsur, S. A. (*with* Rowen, Louis Halle; Tignol, J.-P.) Division algebras of degree 4 and 8 with involution. **80i:16029**
Jančevskiĭ, V. I. Reduced unitary K-theory and division algebras over Henselian discretely valued fields. (Russian) **80b:16019**
Lanski, Charles Lie structure in semiprime rings with involution. II. **80i:16042**
Misso, Paola Some properties of the symmetric center of a skew-field. (Italian. English summary) **80k:16025**
Rowen, Louis Halle *See* **Amitsur, S. A.; et al., 80i:16029**
Saltman, David J. Azumaya algebras with involution. **80a:16013**
Tignol, J.-P. *See* **Amitsur, S. A.; et al., 80i:16029**

16A30 von Neumann regular rings and their generalizations [See also 06Cxx, 06Exx.]

Andrunakievič, A. V. Prime one-sided ideals and the construction of rings. (Russian) **80f:16019**
Felgelstock, Shalom An embedding theorem for weakly regular and fully idempotent rings. **80j:16010**
Fieldhouse, David J. Semihereditary polynomial rings. **80c:16011**
Goodearl, K. R. ★von Neumann regular rings. **80e:16011**
Goursaud, J.-M. (*with* Pascaud, J. L.) Anneaux de polynômes semi-héréditaires. **80k:16019**
Handelman, David (*with* Raphael, R.) Regular Schur rings. **80b:16010**
Hartwig, Robert E. A note on the existence of inner and outer inverses. **80g:16017**
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(*with* Tominaga, Hisao) Regular rings, V-rings and their generalizations. **80e:16012**
Kado, Jiro Projective modules over simple regular rings. **80f:16018**
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On von Neumann regular rings. III. **80c:16012**
Page, S. S. Regular FPF rings. **80d:16012**
Pascaud, J. L. *See* **Goursaud, J.-M., 80k:16019**
Raphael, R. *See* **Handelman, David, 80b:16010**
Roos, C. A class of regularities for rings. **80h:16011**
Szeto, George On weakly biregular algebras. (Russian summary) **80a:16012**
Tominaga, Hisao *See* **Hirano, Yasuyuki, 80e:16012**
Vogel, Annie Mesures de probabilité sur le spectre d'un anneau régulier et applications. (English summary) **80m:16010**

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Hirano, Yasuyuki On Fitting's lemma. **(80j:16022)**
Ponomarev, A. I. Regular pretorsions. (Russian) **(80d:16021)**

16A32 Idempotents in rings [See also 06Exx.]

Birkenmeier, Gary F. Indecomposable decompositions and the minimal direct summand containing the nilpotents. **80b:16011**
Burgess, W. D. (*with* Stephenson, W.) Rings all of whose Pierce stalks are local. **80g:16018**
Chuang, C. L. (*with* Lee, P. H.) Idempotents in simple rings. **80h:16013**
Fuller, Kent R. (*with* Hullinger, Harlan) Rings with finiteness conditions and their categories of functors. **80a:16026**
Hullinger, Harlan *See* **Fuller, Kent R., 80a:16026**
Khuri, Soumaya Makdissi Endomorphism rings and lattice isomorphisms. **80b:16014**
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Secondary classifications:

Hartwig, Robert E. A note on the existence of inner and outer inverses. **(80g:16017)**

16A33 Noetherian rings

Johns, Baxter Left identities in Noetherian rings. (Russian summary) **80a:16027**
Singh, Surjeet (hnp)-rings over which every module admits a basic submodule. **80j:16011**
Würfel, Tilmann Ring extensions and essential monomorphisms. **80k:16020**

Secondary classifications:

Goldie, A. Reduced rank on modules. Application to some theorems of Noetherian rings. **(80b:16015)**
Krause, Günter (*with* Lenagan, T. H.; Stafford, J. T.) Ideal invariance and Artinian quotient rings. **(80f:16007)**
Lanski, Charles Chain conditions in rings with involution. II. **(80a:16024)**
Lenagan, T. H. *See* **Krause, Günter; et al., (80f:16007)**
Resco, Richard (*with* Small, Lance W.; Wadsworth, Adrian R.) Tensor products of division rings and finite generation of subfields. **(80g:16020)**
Richards, Ron Noetherian prime rings of Krull dimension one. **(80c:16004)**
Small, Lance W. *See* **Resco, Richard; et al., (80g:16020)**
Stafford, J. T. *See* **Krause, Günter; et al., (80f:16007)**
Trauber, Philip Un théorème de Stone-von Neumann formel. (English summary) **(80k:58090)**
Wadsworth, Adrian R. *See* **Resco, Richard; et al., (80g:16020)**
Warfield, Robert B., Jr. Modules over fully bounded Noetherian rings. **(80m:16017)**

16A34 Rings with annihilator conditions, chain conditions (Goldie rings)

Cohen, Miriam Centralizers of algebraic elements. **80a:16028**
Fisher, Joe W. Chain conditions for modular lattices with finite group actions. **80f:16019**
Golubčik, I. Z. The group of units of prime Goldie rings. (Russian) **80d:16013**
Sarath, B. (*with* Varadarajan, K.) Dual Goldie dimension. II. **80k:16021**
Varadarajan, K. Dual Goldie dimension. **80d:16014**
See also **Sarath, B., 80k:16021**

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Humpert, W. Ringe mit dichtem Rechtsquasizentrum. **(80g:16037)**
Montgomery, Susan Outer automorphisms of semi-prime rings. **(80b:16028)**
Müller, Bruno J. Ideal invariance and localization. **(80f:16007)**

16A35 Artinian rings

Dinh Van Huynh Über Ringe mit eingeschränkter Minimalbedingung höherer Stufe für Rechtsideale. II. **80h:16015a**
(*with* Widiger, Alfred) Über Ringe mit eingeschränkter Minimalbedingung höherer Stufe für Rechtsideale. III. **80h:16015b**
Über Artinsche Ringe. **80f:16022**
Jøndrup, Søren (*with* Ringel, Claus Michael) Remarks on a paper by Skornyakov concerning rings for which every module is a direct sum of left ideals. **80h:16016**
Murase, Ichiro (*with* Tominaga, Hisao) On powers of Artinian rings without identity. **80a:16029**
Platzeck, María Inés On algebras stably equivalent to an hereditary Artin algebra. **80h:16017**
Ringel, Claus Michael *See* **Jøndrup, Søren, 80h:16016**
Tominaga, Hisao *See* **Murase, Ichiro, 80a:16029**
Widiger, Alfred *See* **Dinh Van Huynh, 80h:16015b**

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Auslander, Maurice (*with* Platzeck, María Inés; Reiten, Idun) Coxeter functors without diagrams. **(80c:16027)**
Beidar, K. I. Associative rings and finite groups of automorphisms. (Russian) **(80g:16043)**
Bittman, Richard M. (*with* Levy, Lawrence S.) Idempotent Artinian rings and projective covers. **(80d:16027)**
Chamarie, Marc ★Sur les ordres maximaux au sens d'Asano. **(80k:16011)**
Levy, Lawrence S. *See* **Bittman, Richard M., (80d:16027)**
Platzeck, María Inés *See* **Auslander, Maurice; et al., (80c:16027)**
Reiten, Idun A note on stable equivalence and Nakayama algebras. **(80k:16031)**
See also **Auslander, Maurice; et al., (80c:16027)**

16A36 Frobenius algebras, quasi-Frobenius rings and their generalizations

Kawada, Yutaka On dominant modules and dominant rings. **80h:16018**
Pascaud, J. L. (*with* Valette, J.) Group actions on Q-F-rings. **80m:16011**
Sekiyama, Hideaki Trivial extension of a ring with balanced condition. **80j:16012**
Sumioka, Takeshi On QF-3 and 1-Gorenstein rings. **80f:16020**
Valette, J. *See* **Pascaud, J. L., 80m:16011**

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Miyashita, Yôichi On a skew polynomial ring. **(80f:16003)**

16A38 Rings with polynomial identity

Beidar, K. I. Classical rings of quotients of PI-algebras. (Russian) **80c:16013**
Rings with generalized identities. III. (Russian. English summary) **80a:16030**
Benediktovič, I. I. (*with* Zalesskiĭ, A. E.) Almost standard identities of matrix algebras. (Russian. English summary) **80i:16023**
Braun, Amiram Affine polynomial identity rings and their generalizations. **80f:16021**
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Gardner, B. J. A note on ring epimorphisms and polynomial identities. **80e:16013**
Giambruno, Antonino *See* **Felzenszwalb, Bernardo, 80k:16022**
Golubčik, I. Z. (*with* Mihalev, A. V.) A note on varieties of semiprime rings with semigroups identities. **80a:16031**
Guseva, I. L. Semiprime algebras with a one-sided ideal that satisfies a polynomial identity. (Russian) **80k:16023**
Harčenko, V. K. A remark on central polynomials. (Russian) **80i:16024**
Ikehata, Shûichi Note on the n-center of an algebra. **80m:16012**
Indik, Robert A. A PI-algebra which is not PI when an inverse is adjoined. **80d:16015**
Jacobson, Nathan Some recent developments in the theory of algebras with polynomial identities. **80j:16013**
Jøndrup, Søren Rings of quotients of some semiprime P.I. rings. **80b:16012**
Lestmann, Phillip Going down and the spec map in PI rings. **80a:16032**
Mihalev, A. V. *See* **Golubčik, I. Z., 80a:16031**
Regev, Amitai T-ideals of degree 3 are finitely generated. **80a:16033**
Rowen, Louis Halle Correction to: "Monomial conditions on prime rings" (Israel J. Math. 27 (1977), no. 2, 131–149). **80b:16013**
Shindô, Kôji Polynomial identities of certain algebras. **80d:16016**
Zaharova, E. N. Radically semisimple classes and strong $\mathcal{J}$-semisimplicity of locally finite PI-algebras. (Russian) **80k:16024**
Zalesskiĭ, A. E. *See* **Benediktovič, I. I., 80i:16023**
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Fuelberth, John (*with* Kirkman, Ellen E.; Kuzmanovich, James J.) Hereditary module-finite algebras. **(80k:16006)**
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Kirkman, Ellen E. *See* **Fuelberth, John; et al., (80k:16006)**
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Kuzmanovich, James J. *See* **Fuelberth, John; et al., (80k:16006)**

Mogami, Isao *See* **Kishimoto, Kazuo.** **(80g:16040)**
van Oystaeyen, F. (*with* Verschoren, A.) Relative localization; bimodules and semiprime P.I. rings. **(80e:16004)**
Rowen, Louis Halle Polynomial identities of nonassociative rings. I. The general structure theory of nonassociative rings, with emphasis on polynomial identities and central polynomials. **(80b:17001a)**
Polynomial identities of nonassociative rings. II. Fine points of the structure theory. **(80b:17001b)**
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Schelter, W. *See* **Artin, M.,** **(80e:14003)**
Smith, Bruce D. An application of nonstandard model theory. **(80i:17021)**
Verschoren, A. *See* **van Oystaeyen, F.,** **(80e:16004)**
Volkov, M. V. Lattices of varieties of algebras. (Russian) **(80g:08013)**

16A39 Skew fields [See also 12E15.], division rings

Alperin, Roger (*with* Dennis, R. Keith) K_2 of quaternion algebras. **80h:16020**
Amitsur, S. A. (*with* Small, Lance W.) Polynomials over division rings. **80f:16022**
Dennis, R. Keith *See* **Alperin, Roger,** **80h:16020**
Dicks, Warren (*with* Sontag, Eduardo D.) Sylvester domains. **80j:16014**
Formanek, Edward The center of the ring of 3×3 generic matrices. **80h:16019**
Herstein, I. N. Multiplicative commutators in division rings. **80a:16034**
Misso, Paola Some properties of the symmetric center of a skew-field. (Italian. English summary) **80k:16025**
Quebbemann, Heinz-Georg Schiefkörper als Endomorphismenringe einfacher Moduln über einer Weyl-Algebra. **80i:16026**
Radó, F. On the definition of skew-fields. **80k:16026**
Rehmann, Ulf Die Kommutatorfaktorgruppe der Normeinsgruppe einer p-adischen Divisionsalgebra. **80j:16015**
Resco, Richard Transcendental division algebras and simple Noetherian rings. **80i:16027**
(*with* Small, Lance W.; Wadsworth, Adrian R.) Tensor products of division rings and finite generation of subfields. **80g:16020**
Saltman, David J. Indecomposable division algebras. **80g:16021**
Small, Lance W. *See* **Amitsur, S. A.,** **80f:16022** *and* **Resco, Richard; et al.,** **80g:16020**
Smith, Kirby C. A characterization of quaternion division algebras. **80c:16014**
Sontag, Eduardo D. *See* **Dicks, Warren,** **80j:16014**
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Golubčik, I. Z. The group of units of prime Goldie rings. (Russian) **(80d:16013)**
Halle, Darrell E. On central simple algebras of given exponent. **(80i:16011)**
Heimbeck, Günter Bemerkung zu einem Satz von Baer. (English summary) **(80m:12024)**
Lee, P. H. *See* **Chuang, C. L.,** **(80h:16013)**
Malcolmson, Peter A prime matrix ideal yields a skew field. **(80d:16003)**
Risman, Lawrence J. Group rings and series. **(80b:16003)**

16A40 Simple and semisimple Artinian rings

Chacron, M. Unitaries in simple Artinian rings. **80d:16017**

Secondary classifications:

Albrecht, Uwe Nicht streng-galoissche Schiefkörpererweiterungen endlichen Ranges über dem Zentrum. **(80a:16047)**
van Deuren, Jean-Pierre Étude du degré de transcendance des sous-corps commutatifs des corps de fractions des anneaux d'opérateurs différentiels à coefficients dans un corps commutatif de caractéristique nulle. (English summary) **(80a:12026)**
Ranicki, Andrew On the algebraic L-theory of semisimple rings. **(80a:18014)**
Rehmann, Ulf (*with* Stuhler, Ulrich) On K_2 of finite-dimensional division algebras over arithmetical fields. **(80g:12012)**
Stuhler, Ulrich *See* **Rehmann, Ulf,** **(80g:12012)**
Tits, Jacques Groupes de Whitehead de groupes algébriques simples sur un corps (d'après V. P. Platonov et al.). **(80d:12008)**

16A42 Rings of linear transformations, matrix rings, infinite matrix rings [See also 15A30.]

Burkov, V. D. Derivations of generalized quasimatrix rings. (Russian) **80i:16028**

Secondary classifications:

Brawley, J. V. (*with* Gamble, R. O.) Involutory matrices over finite commutative rings. **(80f:15017)**
Estes, Dennis R. Determinants of Galois automorphisms of maximal commutative rings of 2×2 matrices. **(80i:15010)**
Gamble, R. O. *See* **Brawley, J. V.,** **(80f:15017)**
Pearson, K. R. A lower bound for the degree of polynomials satisfied by matrices. **(80i:15012)**
Robson, J. C. Polynomials satisfied by matrices. **(80j:15012)**

16A44 Finite rings [See also 12Cxx, 13Mxx.]

Putcha, Mohan S. (*with* Yaqub, Adil) Rings with a finite set of nonnilpotents. **80b:16014**
Sumiyama, Takao Note on maximal Galois subrings of finite local rings. **80k:16027**
Yaqub, Adil *See* **Putcha, Mohan S.,** **80b:16014**

Secondary classifications:

Belkin, V. P. Quasi-identities of finite rings and lattices. (Russian) **(80g:08015)**
Khazal, Reyadh R. Multiplicative periodicity in rings. **(80f:16013)**

16A45 Other types of rings and algebras

Amitsur, S. A. (*with* Rowen, Louis Halle; Tignol, J.-P.) Division algebras of degree 4 and 8 with involution. **80i:16029**
Maxson, Carlton J. Rigid rings. **80c:16016**
Ringel, Claus Michael Finite dimensional hereditary algebras of wild representation type. **80c:16017**
Robson, J. C. A unified approach to unity. **80f:16023**
Rowen, Louis Halle *See* **Amitsur, S. A.; et al.,** **80i:16029**
Tignol, J.-P. *See* **Amitsur, S. A.; et al.,** **80i:16029**
Tominaga, Hisao A generalization of a theorem of A. Kertész. **80j:16016**

Secondary classifications:

Dinh Van Huynh (*with* Widiger, Alfred) Über Ringe mit eingeschränkter Minimalbedingung höherer Stufe für Unterringe. **(80f:16005)**
Giuli, Eraldo A Stone-Weierstrass theorem for sheaves. (Italian. English summary) **(80k:54031)**
Goursaud, J.-M. (*with* Pascaud, J. L.) Anneaux de polynômes semi-héréditaires. **(80k:16019)**
Handelman, David Stable range in AW^* algebras. **(80h:46101)**
Lanski, Charles Unitary invariance in algebraic algebras. **(80j:16009)**
Pascaud, J. L. *See* **Goursaud, J.-M.,** **(80k:16019)**
Platzeck, María Inés On algebras stably equivalent to an hereditary Artin algebra. **(80h:16017)**
Resco, Richard (*with* Small, Lance W.; Wadsworth, Adrian R.) Tensor products of division rings and finite generation of subfields. **(80g:16020)**
Small, Lance W. *See* **Resco, Richard; et al.,** **(80g:16020)**
Spera, Antonino Giorgio Radical of a Hestenes ring. (Italian) **(80h:17006)**
Wadsworth, Adrian R. *See* **Resco, Richard; et al.,** **(80g:16020)**
Widiger, Alfred *See* **Dinh Van Huynh,** **(80f:16005)**

16A46 Finite-dimensional algebras

Chamarie, Marc Anneaux noethériens à droite entiers sur leur centre. **80k:16028**
Damiano, Robert F. A right PCI ring is right Noetherian. **80i:16030**
Flanigan, Francis J. On the ideal and radical embedding of algebras. II. Nilpotent radicals. **80k:16029**
Ikushima, Akira *See* **Mimura, Fumitake,** **80k:16030**
Mimura, Fumitake (*with* Ikushima, Akira) Generalized Clifford groups. **80k:16030**
Reiten, Idun A note on stable equivalence and Nakayama algebras. **80k:16031**
Renault, G. Anneaux de polynômes de Ore sur des anneaux artiniens. **80f:16024**
Röhrl, Helmut On the zeros of polynomials over arbitrary finite-dimensional algebras. **80g:16022**

Secondary classifications:

Cherlin, Gregory Superstable division rings. **(80g:03034)**
Fuller, Kent R. (*with* Hullinger, Harlan) Rings with finiteness conditions and their categories of functors. **(80a:16026)**
Hullinger, Harlan *See* **Fuller, Kent R.,** **(80a:16026)**
Johns, Baxter Left identities in Noetherian rings. (Russian summary) **(80a:16027)**
Kupisch, Herbert Basisalgebren symmetrischer Algebren und eine Vermutung von Gabriel. **(80b:16024)**
Tuganbaev, A. A. Pseudoinjective modules and extension of automorphisms. (Russian) **(80g:16028)**

16A48 Structure, classification

Al-Daffa', Ali Abdullah *See* **Yahya, S. M.,** **80j:16017**
Burgess, W. D. (*with* Stephenson, W.) An analogue of the Pierce sheaf for noncommutative rings. **80f:16025**
Goldie, A. Reduced rank on modules. Application to some theorems of Noetherian rings. **80b:16015**
Hansen, Friedhelm Dreiecks-Darstellung von Endomorphismenringen injektiver Moduln. **80e:16014**
Hill, David A. Semigroup ideals in rings. **80g:16024**
Hmel'nickiĭ, I. L. Rings in which all subrings are meta-ideals of finite index. (Russian) **80m:16013**
Kiss, Elemér Über das Linkspseudozentrum eines Ringes. **80f:16026**
Mohamed, Saad (*with* Singh, Surjeet) Weak q-rings with zero singular ideal. **80f:16027**
Norton, P. N. 0-Hecke algebras. **80e:16015**
Singh, Surjeet *See* **Mohamed, Saad,** **80f:16027**
Smith, Patrick F. Rings characterized by their cyclic modules. **80d:16018**
Stephenson, W. *See* **Burgess, W. D.,** **80f:16025**
Sumiyama, Takao Note on l-rings. **80g:16023**
Yahya, S. M. (*with* Al-Daffa', Ali Abdullah) On cogenerators in modules. **80j:16017**

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Ahsan, Javed Completely hereditary rings. (Italian summary) **(80c:16024)**
Gubareni, N. M. Semiperfect right-hereditary rings of module bounded type. (Russian) **(80g:16033)**
Khazal, Reyadh R. Multiplicative periodicity in rings. **(80f:16013)**
Wiegandt, Richard Correction and remark to my paper: "Characterizations of the Baer radical class by almost nilpotent rings" [Publ. Math. Debrecen **23** (1976), no. 1-2, 15–17; MR **54** #2715]. **(80k:16014)**

Yamagata, Kunio Indecomposable injective functors from an abelian category to the category of abelian groups. **(80j:18017)**

16A49 Duality theory

Hauck, Joel K. Self-duality and serial rings. **80i:16031**
Lemonnier, Benoit AB5* et la dualité de Morita. (English summary) **80k:16032**

Secondary classifications:

Fuchs, Laszlo On a duality of modules over valuation rings. (Italian summary) **(80a:13028)**
Onodera, Takeshi On modules which are flat over their endomorphism rings. **(80a:16035)**
Ramamurthi, V. S. On modules with projective character modules. **(80a:16036)**
Rehmann, Ulf Die Kommutatorfaktorgruppe der Normeinsgruppe einer p-adischen Divisionsalgebra. **(80j:16015)**
Trauber, Philip Un théorème de Stone-von Neumann formel. (English summary) **(80k:58090)**
Upham, Mary H. Localization and completion of FBN hereditary rings. **(80i:16008)**
Yamagata, Kunio On Morita duality for additive group valued functors. **(80d:16029)**

16A50 Projective and flat modules and generalizations

Bland, Paul E. Remarks on strongly M-projective modules. **80c:16018**
Choudhury, D. P. (*with* Tewari, K.) Tensor purities, cyclic quasiprojectives and cocyclic copurity. **80j:16018**
Generalov, A. I. Axiomatic description of weak purities in a category of modules. (Russian) **80h:16021**
Jirásko, Josef *See* **Jirásková, Hana, 80f:16028**
Jirásková, Hana (*with* Jirásko, Josef) Generalized projectivity. **80f:16028**
Jøndrup, Søren Flat and projective modules. **80g:16025**
Kurata, Yoshiki (*with* Morimoto, Shoji) A note on quasicorational extensions. **80g:16026**
Morimoto, Shoji *See* **Kurata, Yoshiki, 80g:16026**
Năstăsescu, Constantin Conditions de finitude pour les modules. **80i:16032**
Onodera, Takeshi On modules which are flat over their endomorphism rings. **80a:16035**
Ramamurthi, V. S. On modules with projective character modules. **80a:16036**
Tewari, K. *See* **Choudhury, D. P., 80j:16018**

Secondary classifications:

Mohamed, Saad (*with* Müller, Bruno J.) Decomposition of dual-continuous modules. **(80k:16033)**
Müller, Bruno J. *See* **Mohamed, Saad, (80k:16033)**
Rangaswamy, K. M. Some remarks on the endomorphism rings of quasiprojective modules. **(80g:16036)**
Tuganbaev, A. A. Characterizations of rings using poorly injective and poorly projective modules. (Russian. English summary) **(80m:16002)**

16A51 Perfect, semiperfect rings and modules and their generalizations

Kerner, Otto Ringe mit verallgemeinerter Kupischreihe. **80d:16019**
Mohamed, Saad (*with* Müller, Bruno J.) Decomposition of dual-continuous modules. **80k:16033**
Müller, Bruno J. *See* **Mohamed, Saad, 80k:16033**
Wisbauer, Robert σ-semiperfekte und σ-perfekte Moduln. **80j:16019**

Secondary classifications:

Bittman, Richard M. (*with* Levy, Lawrence S.) Idempotent Artinian rings and projective covers. **(80d:16027)**
Levy, Lawrence S. *See* **Bittman, Richard M., (80d:16027)**

16A52 Injective modules, self-injective rings and generalizations

Anderson, Frank W. Simple injective modules. **80g:16027**
Birkenmeier, Gary F. Modules which are subisomorphic to injective modules. **80a:16037**
Byrd, Kenneth A. Right self-injective rings whose essential right ideals are two-sided. **80m:16014**
Faith, Carl Self-injective rings. **80i:16033**
Goldston Barnwell, Beth (*with* Mewborn, A. C.) The structure sheaf of an incidence algebra. **80h:16022**
Kutami, Mamoru (*with* Oshiro, Kiyoichi) Direct sums of nonsingular indecomposable injective modules. **80a:16038**
Lawrence, John Erratum to: "A countable self-injective ring is quasi-Frobenius" (Proc. Amer. Math. Soc. **65** (1977), no. 2, 217–220). **80c:16019**
Lopez, Antonio M., Jr. (*with* Luedeman, John K.) Quasi-injective S-systems and their S-endomorphism semigroup. **80b:16016**
Luedeman, John K. *See* **Lopez, Antonio M., Jr., 80b:16016**
Mewborn, A. C. *See* **Goldston Barnwell, Beth, 80h:16022**
Ming, Roger Yue Chi A remark on decomposable modules. **80k:16034**
Mohammad, Asrar Rings whose proper homomorphic images are left q-rings. **80k:16035**
Onodera, Takeshi A note on linearly compact modules. **80b:16023**
Oshiro, Kiyoichi *See* **Kutami, Mamoru, 80a:16038**
Page, S. S. Continuous rings and rings of quotients. **80b:16017**
Images of injectives and universally cotorsionless modules. **80b:16018**
Tuganbaev, A. A. Pseudoinjective modules and extension of automorphisms. (Russian) **80g:16028**

Secondary classifications:

Page, S. S. Regular FPF rings. **(80d:16012)**
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16A53 Special types of modules

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Fuller, Kent R. *See* **Camillo, Victor, 80m:16015**
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16A54 Grothendieck groups of rings, K-theory of noncommunative rings [See also 18F25, 18F30.]

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Magurn, Bruce A. Images of SK_1ZG. **(80m:18006)**
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16A55 Dimension theory (Krull, Gabriel)

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16A56 Extension theory

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Okoh, Frank A splitting criterion for pairs of linear transformations. **80f:16030**

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16A58 Deformation theory of rings and algebras [See also 13D10, 14D15, 32Gxx.]

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16A60 Homological dimension

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Kohn, Peter Finite projective dimension under change of rings. **80a:16040**
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16A62 Homological methods

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16A63 Torsion theories [See also 13D30, 18E40.]

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Fenrick, Maureen H. Rings for which all preradicals have finite length. 80i:16035
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16A64 Modules and representations

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Green, Edward L. (*with* Reiner, Irving) Integral representations and diagrams. 80g:16032
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Al-Daffa', Ali Abdullah *See* Yahya, S. M., (80j:16017)
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16A65 Endomorphism rings

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16A66 Ideal theory, prime ideals and their generalizations

Alev, Jack Systèmes de générateurs normalisants. 80e:16020
Deshpande, M. G. *See* Satyanarayana, M., 80e:16022

van Geel, J. Primes in rings and their extensions to algebras over rings. **80e:16021**
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Xu, Yong Hua The σ-structure of rings. I. (Chinese) **(80c:16030)**

16A68 Lie, Jordan and other nonassociative structures on associative rings

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Lanski, Charles Lie structure in semiprime rings with involution. II. **80i:16042**
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16A70 Commutativity theorems

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Hirano, Yasuyuki A commutativity theorem for left s-unital rings. **80c:16029**
Hongan, Motoshi (*with* Tominaga, Hisao) A commutativity theorem for s-unital rings. **80k:16043**
Ikehata, Shôichi (*with* Tominaga, Hisao) A commutativity theorem. **80k:16044**
Kishimoto, Kazuo (*with* Mogami, Isao) Commutativity of certain rings. **80g:16040**
Mogami, Isao *See* **Kishimoto, Kazuo**, **80g:16040**
Outcalt, David L. (*with* Yaqub, Adil) Commutativity and structure theorems for rings with polynomial constraints. **80a:16046**
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Luh, Jiang *See* **Chung, Lung O.**; **et al.**, **(80f:16036)**
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16A72 Automorphisms, derivations, other morphisms

Chung, Lung O. (*with* Luh, Jiang; Richoux, Anthony N.) Derivations and commutativity of rings. **80f:16036**
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Reiner, Irving Lifting isomorphisms of modules. **(80j:16023)**
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Vidal, Robert Anneaux de Cohen, non commutatifs, sur un corps local. (English summary) **(80e:16005)**

16A74 Galois theory

Albrecht, Uwe Nicht streng-galoissche Schiefkörpererweiterungen endlichen Ranges über dem Zentrum. **80a:16047**
Beidar, K. I. Associative rings and finite groups of automorphisms. (Russian) **80g:16043**
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Harčenko, V. K. Algebras of invariants of free algebras. (Russian) **(80e:16003)**
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Quotients of stems with respect to particular annihilators. (Italian. English summary) **80f:16038**
Jat, J. L. (*with* Choudhary, S. C.) On left bipotent near-rings. **80j:16024**
Kaarli, K. Near-rings generated by the endomorphisms of some groups. (Russian. Estonian and English summaries) **80a:16049**
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Marin, V. G. Some properties of regular near-algebras. (Russian) **80i:16044**
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Natarajan, N. S. Ordered nearrings. **80c:16032**
Oswald, A. On near-rings of quotients. **80k:16047**
Radhakrishna, A. (*with* Bhandari, M. C.) On lattice ordered near-rings. **80d:16023**
Ramakotaiah, D. (*with* Santhakumari, C.) On right quasi-regular elements in a near-ring. **80d:16024**
(*with* Rao, G. K.) A topological formulation of the density theorem for 0-primitive near-rings. **80a:16050**
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Ştefănescu, Mirela A correspondence between the class of left nonassociative near-rings and a class of quasigroups. **(80b:20096)**

16A78 Semirings and other generalizations of rings

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Bertman, Martha O. Bicyclic semirings. **80g:16044**
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(*with* Nguen Kuok Toan) Quasimodules. II. (Russian. Hungarian and English summaries) **80g:16045b**
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Griepentrog, R. D. (*with* Weinert, H. J.) Embedding semirings into semirings with identity. **80i:16045**
Haftendorn, Dörte Additiv kommutative und idempotente Halbringe mit Faktorbedingung. II. **80d:16025**
Kovalenko, B. B. Generalized modules over inverse semirings. (Russian) **80j:16025**
Kumar, Nirmesh On N-ring. **80f:16040**
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Olson, D. M. A note on the homomorphism theorem for hemirings. **80a:16053**
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16A80 Topological rings and modules [See also 13Jxx.]

Arnautov, V. I. (*with* Ursul, M. I.) Imbedding of topological rings into connected ones. (Russian) **80k:16050**
D'Este, Gabriella A theorem on the endomorphism ring of reduced torsion-free abelian groups and some applications. (Italian summary) **80a:16055**
Mulvey, Christopher J. On a condition for the representability of a topological ring. **80i:16047**
Pham Ngoc Anh Die additive Struktur der im engeren Sinne linear kompakten Ringe. **80k:16051**
(*with* Wiegandt, Richard) Linearly compact semisimple rings and regular modules. **80d:16026**
Porubský, Štefan On covering systems on rings. (Russian summary) **80b:16031**
Ursul, M. I. *See* **Arnautov, V. I., 80k:16050**
Wiegandt, Richard *See* **Pham Ngoc Anh, 80d:16026**

16A86 Ordered rings [See also 06F25.]

16A89 Equivalence of module categories

Azumaya, Gorô Some aspects of Fuller's theorem. **80k:16052**
Nishida, Kenji Construction of coreflectors. **80g:16047**

16A90 Categorical methods and categorical ring theory

Bittman, Richard M. (*with* Levy, Lawrence S.) Idempotent Artinian rings and projective covers. **80d:16027**
Hager, Anthony W. (*with* Robertson, Lewis C.) On the embedding into a ring of an Archimedean *l*-group. **80h:16031**
Lee, Sin Min Rings representable as endomorphism rings of functors. **80f:16042**
Levy, Lawrence S. *See* **Bittman, Richard M., 80d:16027**
Macdonald, Roderick N. S. Representable dualities between finitely closed subcategories of modules. **80f:16041**
Mulvey, Christopher J. A generalisation of Gel'fand duality. **80d:16028**
Robertson, Lewis C. *See* **Hager, Anthony W., 80h:16031**
Sato, Masahisa On equivalences between module subcategories. **80k:16053**
Yamagata, Kunio On Morita duality for additive group valued functors. **80d:16029**

Secondary classifications:

Gabriel, Peter (*with* Riedtmann, Ch.) Group representations without groups. **(80k:16040)**
Hansen, Friedhelm Ringerweiterung und Lokalisation. **(80f:16029)**
Nishida, Kenji Construction of coreflectors. **(80g:16047)**
Riedtmann, Ch. *See* **Gabriel, Peter, (80k:16040)**

16A99 Miscellaneous topics

Nițâ, Ana Ultraproducts of rings which retain factor properties. (Romanian. French summary) **80i:16048**
Schultz, Barbara Über die zu endlichen zyklischen Ringen gehörigen induktiven Gruppoide. **80g:16048**
Zamjatin, A. P. Prevarieties of associative rings whose elementary theory is decidable. (Russian) **80i:16049**

Secondary classifications:

Strano, Rosario Some properties of associative Ω-rings. (Italian. English summary) **(80j:08001)**

17-XX NONASSOCIATIVE RINGS AND ALGEBRAS

17-01 Elementary exposition, textbooks

Jacobson, Nathan ★Lie algebras. **80k:17001**

Secondary classifications:

Komorowski, Jacek ★Od liczb zespolonych do tensorów, spinorów, algebr Liego i kwadryk. (Polish) [From complex numbers to tensors, spinors, Lie algebras and quadrics] **(80e:00002)**
(Maurin, Krzysztof) *See* **Komorowski, Jacek, (80e:00002)**

17-02 Advanced exposition (research surveys, monographs, etc.)

Bourbaki, Nicolas ★Группы и алгебры Ли. (Russian) [Lie groups and Lie algebras] **80h:17001**
(Kostrikin, A. I.) *See* **Bourbaki, Nicolas, 80h:17001**
(Radakov, A. N.) *See* **Bourbaki, Nicolas, 80h:17001**
Šestakov, I. P. *See* **Ževlakov, K. A.; et al., 80h:17002**
Širšov, A. I. *See* **Ževlakov, K. A.; et al., 80h:17002**
Slin'ko, A. M. *See* **Ževlakov, K. A.; et al., 80h:17002**
Ževlakov, K. A. (*with* Slin'ko, A. M.; Šestakov, I. P.; Širšov, A. I.) ★Кольца, близкие к ассоциативным. (Russian) [Rings that are nearly associative] **80h:17002**

17-03 Historical (must also be assigned at least one classification number from Section 01)

17-04 Explicit machine computation and programs (not the theory of computation or programming)

Bellinfante, Johan G. F. Computers in Lie algebras. **80h:17003**

17-06 Proceedings, conferences, etc.

Secondary classifications:

(Beiglböck, Wolf) *See* **Group theoretical methods in physics, (80i:81002)**
(Böhm, Arno) *See* **Group theoretical methods in physics, (80i:81002)**
(Takasugi, Eiichi) *See* **Group theoretical methods in physics, (80i:81002)**
Austin, Tex. *See* **Group theoretical methods in physics, (80i:81002)**
Colloquium:
Group Theoretical Methods in Physics *See* **Group theoretical methods in physics, (80i:81002)**
Group Theory *See* **Group theoretical methods in physics, (80i:81002)**
Conference:
Group Theory and Mathematical Physics *See* **Group theoretical methods in physics, (80i:81002)**
Group theoretical methods in physics ★Group theoretical methods in physics. **(80i:81002)**
Mathematical physics *See* **Group theoretical methods in physics, (80i:81002)**

17Axx General nonassociative rings

17A01 General theory

17A05 Power-associative

Kölv, M. (*with* Loide, R.-K.) First-order power-associative deformation of Pauli algebra. (Russian summary) **80i:17001**
Loide, R.-K. *See* **Kölv, M., 80i:17001**
Mitchell, William J. (*with* Osborn, J. Marshall) Prime commutative power-associative algebras with descending chain condition. **80c:17001**
Osborn, J. Marshall *See* **Mitchell, William J., 80c:17001**

17A10 Commutative power-associative

17A15 Noncommutative Jordan algebras

Secondary classifications:

Domokos, G. (*with* Kövesi-Domokos, S.) Towards an algebraic quantum chromodynamics. **(80g:81071)**
Kövesi-Domokos, S. *See* **Domokos, G., (80g:81071)**

17A20 Flexible algebras

Secondary classifications:

Myung, Hyo Chul Lie-admissible algebras. **(80a:17002)**
See also **Okubo, Susumu, (80i:17002)**
Okubo, Susumu Pseudo-quaternion and pseudo-octonion algebras. **(80a:17004)**
(*with* Myung, Hyo Chul) On the classification of simple flexible Lie-admissible algebras. **(80i:17002)**

17A25 Nodal algebras

Secondary classifications:

Myung, Hyo Chul On nonflexible Lie-admissible algebras. **(80a:17003)**

17A30 Algebras satisfying other identities

Boers, A. H. *n*-product-functions and (*n*, 2)-PA rings. **80c:17002**
Carlsson, Renate On the exceptional central simple non-Lie Mal'cev algebras. **80a:17001**
Chung, Lung O. (*with* Luh, Jiang; Putcha, Mohan S.) Weakly scalar associative algebras. **80d:17001**
Gardner, B. J. Extension-closed varieties of rings need not have attainable identities. **80h:17004**
Hentzel, Irvin Roy Alternators of a right alternative algebra. **80e:17001**
Kleinfeld, Erwin (*with* Smith, Harry F.) Prime locally (−1, 1) rings with chain condition. **80c:17002a**
Luh, Jiang *See* **Chung, Lung O.; et al., 80d:17001**
Markovičev, A. S. Nil rings of type (γ, δ). (Russian) **80h:17005**
Myung, Hyo Chul Lie-admissible algebras. **80a:17002**
On nonflexible Lie-admissible algebras. **80a:17003**
See also **Okubo, Susumu, 80i:17002**
Okubo, Susumu Pseudo-quaternion and pseudo-octonion algebras. **80a:17004**
Deformation of the Lie-admissible pseudo-octonion algebra into the octonion algebra. **80j:17001a**

Octonion as traceless 3×3 matrices via a flexible Lie-admissible algebra. **80j:17001b**

(*with* Myung, Hyo Chul) On the classification of simple flexible Lie-admissible algebras. **80i:17002**

Pokrass, David Solvability and nilpotency in generalized alternative rings. **80c:17003**

Putcha, Mohan S. *See* **Chung, Lang O.; et al., 80d:17001**

Rowen, Louis Halle Polynomial identities of nonassociative rings. I. The general structure theory of nonassociative rings, with emphasis on polynomial identities and central polynomials. **80b:17001a**

Polynomial identities of nonassociative rings. II. Fine points of the structure theory. **80b:17001b**

Polynomial identities of nonassociative rings. III. Applications. **80b:17001c**

Smith, Harry F. Finite-dimensional locally $(-1, 1)$ algebras. **80e:17002b**

See also **Kleinfeld, Erwin, 80e:17002a**

Thedy, Armin Right alternative algebras and Wedderburn principal theorem. **80m:17001**

Secondary classifications:

Cantrijn, Frans On structure-preserving transformations for Newtonian Lie-admissible equations. **(80i:70020)**

Constantopoulos, J. P. (*with* Ktorides, C. N.) Symmetry schemes compatible with nonselfadjoint Lie-admissible forces. **(80k:81168)**

Gainov, A. T. Monocomposition algebras with a monosolvable KM-algebra. (Russian) **(80k:17002)**

Ktorides, C. N. Lie-admissible quantization in a self-interacting scalar field theory. **(80a:81077)**

See also **Constantopoulos, J. P., (80k:81168)**

Markovičev, A. S. The heredity of radicals of rings of type (γ, δ). (Russian) **(80i:17004)**

Oates-Williams, Sheila (*with* Vaughan-Lee, M. R.) Varieties that make one Cross. **(80c:08006)**

Vaughan-Lee, M. R. *See* **Oates-Williams, Sheila, (80c:08006)**

17A35 Division algebras

Gainov, A. T. Monocomposition algebras with a monosolvable KM-algebra. (Russian) **80k:17002**

17A40 Ternary compositions

Qundri, Murtaza A. On a generalization of Lie rings of simple associative rings. **80d:17002**

Spera, Antonino Giorgio Radical of a Hestenes ring. (Italian) **80h:17006**

Secondary classifications:

Bars, Itzhak (*with* Günaydin, Murat) Construction of Lie algebras and Lie superalgebras from ternary algebras. **(80m:17002)**

Dragon, N. Generalized symmetry algebras. **(80d:81095)**

Günaydin, Murat *See* **Bars, Itzhak, (80m:17002)**

Kantor, I. L. (*with* Skopec, I. M.) Freudenthal trilinear systems. (Russian) **(80b:17005)**

Kaplan, James L. (*with* Yorke, James A.) Nonassociative, real algebras and quadratic differential equations. **(80d:58060)**

Skopec, I. M. *See* **Kantor, I. L., (80b:17005)**

Yorke, James A. *See* **Kaplan, James L., (80d:58060)**

17A42 Other n-ary compositions

17A45 Quadratic algebras (not quadratic Jordan algebras)

Sprengelmeier, Claus Derivationen und Automorphismen von Algebren, in denen die Gleichung $X^2=0$ nur trivial lösbar ist. (English summary) **80g:17001**

17A50 Free algebras

17A60 Structure theory in general nonassociative rings

Ablan, Alexander On the definition of a hyperatom of a ring. **80f:17001**

Arya, Prem Pal *See* **Kamil, Mohammad, 80i:17003**

Kamil, Mohammad (*with* Arya, Prem Pal) On the commutativity of nonassociative rings. (French summary) **80i:17003**

Wisbauer, Robert Erbliche Moduln und nichtassoziative Ringe. **80e:17003**

Secondary classifications:

Baxter, W. E. (*with* Martindale, W. S., III) Central closure of semiprime nonassociative rings. **(80f:17002)**

Martindale, W. S., III *See* **Baxter, W. E., (80f:17002)**

17A65 Radical theory in general nonassociative rings

Markovičev, A. S. The heredity of radicals of rings of type (γ, δ). (Russian) **80i:17004**

Myung, Hyo Chul Note on the prime radical in nonassociative rings. **80d:17003**

17A70 Super algebras

Backhouse, Nigel A classification of four-dimensional Lie superalgebras. **80c:17004**

Bars, Itzhak (*with* Günaydin, Murat) Construction of Lie algebras and Lie superalgebras from ternary algebras. **80m:17002**

Bernstein, J. N. (*with* Leites, D. A.) Irreducible representations of finite-dimensional Lie superalgebras of series W and S. **80j:17002**

Günaydin, Murat *See* **Bars, Itzhak, 80m:17002**

Leites, D. A. *See* **Bernstein, J. N., 80j:17002**

Ne'eman, Yuval (*with* Regge, T.) Gauge theory of gravity and supergravity on a group manifold. **80c:17005**

Palev, Čavdar Fock-type representation of the Lie superalgebra $A(0, 1)$. **80m:17003**

Regge, T. *See* **Ne'eman, Yuval, 80c:17005**

Scheunert, Manfred ★The theory of Lie superalgebras. **80i:17005**

Uma, S. U. Some remarks on the generalization of superalgebras. **80d:17004**

Secondary classifications:

Agrawala, Vishnu K. Wigner-Eckart theorem for graded generalized Lie algebras. **(80k:81166)**

Deser, S. Supergravity. **(80d:83042)**

Macrae, K. I. Fermions and bosons in a unified framework. I. Physical foundations. **(80a:81119a)**

Fermions and bosons in a unified framework. II. Interacting models. **(80a:81119b)**

Fermions and bosons in a unified framework. III. Mathematical structures and physical questions. **(80a:81119c)**

Palev, Čavdar Lie-superalgebraical approach to the second quantization. **(80k:81061)**

Rittenberg, V. A guide to Lie superalgebras. **(80d:17012)**

(*with* Wyler, D.) Some remarks on Adler's classical algebraic chromodynamics. **(80b:81113)**

Valuev, B. N. Realization of an integral in anticommuting variables. (Russian. English summary) **(80f:81053)**

Wyler, D. *See* **Rittenberg, V., (80b:81113)**

Zumino, B. Some recent developments in supergravity. **(80g:83030)**

17A99 None of the above, but in this section

Abian, Alexander Direct product decomposition of zero-product-associative rings without nilpotent elements. **80c:17006**

Baxter, W. E. (*with* Martindale, W. S., III) Central closure of semiprime nonassociative rings. **80f:17002**

Gainov, A. T. Derivations of monocomposition algebras. (Russian) **80c:17007**

Isomorphisms of finite-dimensional nondegenerate monocompositional algebras. (Russian) **80f:17003**

Leavitt, W. G. (*with* Wiegandt, Richard) Torsion theory for not necessarily associative rings. **80d:17005**

Martindale, W. S., III *See* **Baxter, W. E., 80f:17002**

Medvedev, Ju. A. Finite basability of varieties with a two-term identity. (Russian) **80k:17003**

Rauf Qureshi, M. A. Commutativity of an $(f_0, f_1, \cdots, f_k)$-extensio n of a ring R. **80d:17006**

Röhrl, Helmut Finite-dimensional algebras without nilpotents over algebraically closed fields. **80e:17004**

Wiegandt, Richard *See* **Leavitt, W. G., 80d:17005**

Secondary classifications:

Aissen, Michael (*with* Shay, Brian) Nonassociative multiplication. **(80h:08002)**

Arnautov, V. I. (*with* Ursul, M. I.) Imbedding of topological rings into connected ones. (Russian) **(80k:16050)**

Creangă, Ion Sur l'équation: $Dy = F(x, y)*Dx$ dans une algèbre réelle. **(80f:35006)**

Röhrl, Helmut On the zeros of polynomials over arbitrary finite-dimensional algebras. **(80g:16022)**

Shay, Brian *See* **Aissen, Michael, (80h:08002)**

Ursul, M. I. *See* **Arnautov, V. I., (80k:16050)**

Wisbauer, Robert Separable Moduln von Algebren über Ringen. **(80a:16014)**

17Bxx Lie algebras {For Lie groups, see 22Exx.}

17B05 Structure theory

Benkart, G. M. (*with* Isaacs, I. M.; Osborn, J. Marshall) Lie algebras with self-centralizing ad-nilpotent elements. **80i:17006**

(*with* Isaacs, I. M.; Osborn, J. Marshall) Albert-Zassenhaus Lie algebras and isomorphisms. **80i:17007**

Burdet, G. (*with* Patera, J.; Perrin, M.; Winternitz, P.) Sous-algèbres de Lie de l'algèbre de Schrödinger. **80b:17002**

Huddleston, P. L. Inönü-Wigner contractions of the real four-dimensional Lie algebras. **80f:17004**

Isaacs, I. M. *See* **Benkart, G. M.; et al., 80i:17006** *and* **Benkart, G. M.; et al., 80i:17007**

Koszul, Jean-Louis Variante d'un théorème de H. Ozeki. **80a:17005**

Kukin, G. P. Bases of a free Lie algebra. (Russian) **80b:17003**

Malyšev, F. M. Decompositions of nilpotent Lie algebras. (Russian) **80m:17004**

Osborn, J. Marshall *See* **Benkart, G. M.; et al., 80i:17006** *and* **Benkart, G. M.; et al., 80i:17007**

Patera, J. *See* **Burdet, G.; et al., 80b:17002**

Perrin, M. *See* **Burdet, G.; et al., 80b:17002**

Towers, David A. Dualisms of Lie algebras. **80j:17003**

Winternitz, P. *See* **Burdet, G.; et al., 80b:17002**

Zassenhaus, Hans On the maximal Abelian subrings of the classical Lie algebras. Preliminary report. **80g:17002**

Secondary classifications:

Block, Richard E. (*with* Wilson, Robert Lee) The restricted simple Lie algebras with a two-dimensional Cartan subalgebra. **(80e:17006)**

Bussemaker, F. C. (*with* Cvetković, Dragoš M.; Seidel, J. J.) Graphs related to exceptional root systems. **(80g:05049)**
Cvetković, Dragoš M. *See* **Bussemaker, F. C.; et al., (80g:05049)**
Seidel, J. J. *See* **Bussemaker, F. C.; et al., (80g:05049)**
Wilson, Robert Lee *See* **Block, Richard E., (80e:17006)**

17B10 Representations, algebraic theory (weights)

Block, Richard E. Classification of the irreducible representations of $\mathfrak{sl}(2, C)$. **80i:17008**
Cattaneo, U. (*with* Wreszinski, W.) On contraction of Lie algebra representations. **80h:17007**
Gould, M. D. On tensor operators and characteristic identities for semi-simple Lie algebras. **80e:17005**
Humphreys, J. E. Finite and infinite dimensional modules for semisimple Lie algebras. **80i:17009**
Koreškov, N. A. Irreducible representations of a Lie algebra. (Russian) **80a:17006**
Kostrikin, I. A. Representations of height 1 of infinite-dimensional Lie algebras of the series K_n. (Russian) **80g:17003**
Litvinov, G. L. (*with* Špiz, G. B.) Primary decompositions of finite-dimensional representations of Lie algebras and Lie groups. (Russian) **80k:17004**
Rudakov, A. N. Local universal algebras and reducible representations of Lie algebras. (Russian) **80d:17007**
Servedio, Frank J. Principal irreducible Lie-algebra modules. **80c:17008**
Špiz, G. B. *See* **Litvinov, G. L., 80k:17004**
Wilson, William H. Induced representations of Lie algebras. **80d:17008**
Wreszinski, W. *See* **Cattaneo, U., 80h:17007**

Secondary classifications:

Agrawala, Vishnu K. Micu-type invariants of simple Lie algebras. **(80k:22008)**
Beau, Daniel (*with* Horchani, Salah) A Lie group framework for composite particles and mass spectrum. **(80k:81167)**
Bednář, Miroslav (*with* Šachl, Vladimír F.) Classification and construction of finite-dimensional irreducible representations of the graded algebras; application to the $(Sp(2n); 2n)$ algebra. **(80e:17009)**
Berezin, F. A. (*with* Retah, V. S.) Construction of Lie superalgebras with a semisimple even part. (Russian. English summary) **(80h:17015)**
Camiz, P. (*with* Dattoli, G.; Mignani, Roberto; Prosperi, D.) SU_3 subalgebras of SU_6 and mass sum rules for hadrons with charm, beauty and taste. (Italian and Russian summaries) **(80j:81081)**
Dattoli, G. *See* **Camiz, P.; et al., (80j:81081)**
De Meyer, H. E. *See* **Vanden Berghe, G., (80g:81029)**
Gilmore, R. The classical limit of quantum nonspin systems. **(80g:81024)**
Hesselink, Wim The normality of closures of orbits in a Lie algebra. **(80g:14018)**
Horchani, Salah *See* **Beau, Daniel, (80k:81167)**
Kaniauskas, J. *See* **Špakauskas, V. V.; et al., (80c:22017)**
Magneron, Bernard Structure des polynômes invariants sur l'algèbre de Lie d'un groupe symplectique inhomogène. (English summary) **(80b:22021)**
Mignani, Roberto *See* **Camiz, P.; et al., (80j:81081)**
Norton, P. N. 0-Hecke algebras. **(80e:16015)**
Prosperi, D. *See* **Camiz, P.; et al., (80j:81081)**
Retah, V. S. *See* **Berezin, F. A., (80h:17015)**
Rudzikas, Z. B. *See* **Špakauskas, V. V.; et al., (80c:22017)**
Šachl, Vladimír F. *See* **Bednář, Miroslav, (80e:17009)**
Šapovalov, A. V. Finite-dimensional irreducible representations of Hamiltonian Lie superalgebras. (Russian) **(80h:17016)**
Špakauskas, V. V. (*with* Kaniauskas, J.; Rudzikas, Z. B.) Genealogical coefficients that are reduced in a quasispin space, and submatrix elements of tensorial operators. (Russian. Lithuanian and English summaries) **(80c:22017)**
Vanden Berghe, G. (*with* De Meyer, H. E.) A relation between products of vectors whose components satisfy three-parameter Lie-algebras. **(80g:81029)**
Wilson, William H. On induced representations of Lie algebras, groups and coalgebras. **(80h:18001)**

17B15 Representations, analytic theory

Okubo, Susumu Quartic trace identity for exceptional Lie algebras. **80h:17008**

Secondary classifications:

Humphreys, J. E. (*with* Jantzen, Jens C.) Blocks and indecomposable modules for semisimple algebraic groups. **(80d:20015)**
Jantzen, Jens C. *See* **Humphreys, J. E., (80d:20015)**
Parthasarathy, R. A generalization of the Enright-Varadarajan modules. **(80f:22016)**

17B20 Simple, semisimple, reductive algebras (roots)

Block, Richard E. (*with* Wilson, Robert Lee) The restricted simple Lie algebras with a two-dimensional Cartan subalgebra. **80e:17006**
Deodhar, Vinay V. On Bruhat ordering and weight-lattice ordering for a Weyl group. **80b:17004**
Gomis, J. (*with* Pons, J. M.) The centralizer subalgebras of Poincaré $IO_{3,1}$. (Italian and Russian summaries) **80a:17007a**
(*with* Pons, J. M.) Co-ordinate transformations and centralizer subalgebras of Poincaré $IO_{3,1}$. (Italian and Russian summaries) **80a:17007b**
Harley, James F. Orders in simple Lie algebras of Chevalley type. **80d:17009**
Kantor, I. L. (*with* Skopec, I. M.) Freudenthal trilinear systems. (Russian) **80h:17005**
Mohammed, I. B. Some properties of matrix of coefficients in Block's multiplication table of the simple modular Lie algebras of Block type. **80a:17008**
Pons, J. M. *See* **Gomis, J., 80a:17007a** *and* **Gomis, J., 80a:17007b**
Richardson, R. W. Commuting varieties of semisimple Lie algebras and algebraic groups. **80c:17009**
Skopec, I. M. *See* **Kantor, I. L., 80h:17005**
Wilson, Robert Lee *See* **Block, Richard E., 80e:17006**

Secondary classifications:

Benkart, G. M. (*with* Isaacs, I. M.; Osborn, J. Marshall) Lie algebras with self-centralizing ad-nilpotent elements. **(80i:17006)**
(*with* Isaacs, I. M.; Osborn, J. Marshall) Albert-Zassenhaus Lie algebras and isomorphisms. **(80i:17007)**
Berman, S. D. (*with* Moody, Robert V.) Lie algebra multiplicities. **(80k:17013)**
D'Atri, J. E. (*with* Ziller, W.) Naturally reductive metrics and Einstein metrics on compact Lie groups. **(80i:53023)**
Drucker, Daniel S. (*with* Goldschmidt, David M.) Graphical evaluation of sparse determinants. **(80g:15006)**
Èlašvili, A. G. *See* **Vinberg, È. B., (80b:15039)**
Goldschmidt, David M. *See* **Drucker, Daniel S., (80g:15006)**
Gould, M. D. On tensor operators and characteristic identities for semi-simple Lie algebras. **(80e:17005)**
Isaacs, I. M. *See* **Benkart, G. M.; et al., (80i:17006)** *and* **Benkart, G. M.; et al., (80i:17007)**
Moody, Robert V. *See* **Berman, S. D., (80k:17013)**
Okubo, Susumu Quartic trace identity for exceptional Lie algebras. **(80h:17008)**
Osborn, J. Marshall *See* **Benkart, G. M.; et al., (80i:17006)** *and* **Benkart, G. M.; et al., (80i:17007)**
Vinberg, È. B. (*with* Èlašvili, A. G.) A classification of the three-vectors of nine-dimensional space. (Russian) **(80b:15039)**
Ziller, W. *See* **D'Atri, J. E., (80i:53023)**

17B25 Exceptional algebras

Secondary classifications:

Kimura, Yoshio A hypersurface of the irreducible Hermitian symmetric space of type *E* III. **(80k:32061)**

17B30 Solvable, nilpotent algebras

Bahturin, Ju. A. On identical relations in free polynilpotent Lie algebras. **80j:17004**
Barnes, Donald W. Saturated formations of soluble Lie algebras in characteristic 0. **80a:17009**
Kawamoto, Naoki Subideality and ascendancy in generalized solvable Lie algebras. **80k:17005**
Koch, Helmut Erzeugenden- und Relationenrang für endlich dimensionale nilpotente Liesche Algebren. (Russian summary) **80i:17010**
Vinberg, È. B. Classification of homogeneous nilpotent elements of a semisimple graded Lie algebra. (Russian) **80k:17006**

Secondary classifications:

Charbonnel, Jean-Yves (*with* Khalgui, Mohamed Salah) Polarisations pour un certain type de groupes de Lie. (English summary) **(80b:22011)**
Ikeda, Toshiharu (*with* Kashiwagi, Yoshimi) Some properties of hypercentral Lie algebras. **(80c:17015)**
(*with* Kashiwagi, Yoshimi) Extension theorems on some generalized nilpotent Lie algebras. **(80c:17016)**
Chain conditions for abelian, nilpotent and soluble ideals in Lie algebras. **(80j:17011)**
Joseph, Anthony (*with* Small, Lance W.) An additivity principle for Goldie rank. **(80j:17005)**
Kashiwagi, Yoshimi *See* **Ikeda, Toshiharu, (80c:17015)** *and* **Ikeda, Toshiharu, (80c:17016)**
Khalgui, Mohamed Salah *See* **Charbonnel, Jean-Yves, (80b:22011)**
Small, Lance W. *See* **Joseph, Anthony, (80j:17005)**
Strade, Helmut Darstellungen auflösbarer Lie-*p*-Algebren. **(80b:17009)**

17B35 Universal enveloping algebras, imbeddings

Abellanas, L. (*with* Martínez Alonso, L.) Invariants in enveloping algebras under the action of Lie algebras of derivations. **80b:17009**
Bahturin, Ju. A. A remark on irreducible representations of Lie algebras. **80g:17004**
Borho, Walter Recent advances in enveloping algebras of semisimple Lie-algebras [a report on work of N. Conze, J. Dixmier, M. Duflo, J. C. Jantzen, A. Joseph, W. Borho]. **80f:17005**
Borovskiĭ, Ju. V. Two-sided closed ideals in the superenveloping algebra of the Lie algebra $\mathfrak{sl}(2, C)$. (Russian) **80h:17010**
Dixmier, Jacques Champs de vecteurs adjoints sur les groupes et algèbres de Lie semi-simples. **80i:17011**
Ermolaev, Ju. B. Central elements of the universal enveloping algebra of the Zassenhaus algebra. (Russian) **80d:17010**
Exner, Pavel (*with* Havlíček, Miloslav; Lassner, Wolfgang) Boson representations of classical Lie algebras. **80b:17006**
Ginzburg, V. A. Enveloping algebras and deformations. (Russian) **80i:17012**
Gould, M. D. Applications of the characteristic identity for $GL(N)$. (French summary) **80c:17010**
Havlíček, Miloslav *See* **Exner, Pavel; et al., 80b:17006**
van den Hombergh, Adolf (*with* de Vries, H.) On the differential operators on the quasi-affine variety G/N. **80c:17011**
Joseph, Anthony (*with* Small, Lance W.) An additivity principle for Goldie rank. **80j:17005**

W-module structure in the primitive spectrum of the enveloping algebra of a semisimple Lie algebra. **80k:17007**

On the Gel'fand-Kirillov conjecture for induced ideals in the semisimple case. (French summary) **80j:17006**

Lassner, Wolfgang *See* **Exner, Pavel; et al., 80b:17006**

Martínez Alonso, L. *See* **Abellanas, L., 80h:17009**

Moeglin, Colette Idéaux primitifs dans les algèbres enveloppantes. (English summary) **80h:17007**

Nghiêm Xuân Hai ★Algèbres de Heisenberg et géométrie symplectique des algèbres de Lie. **80g:17005**

Commutative subalgebras and representations of the enveloping algebra of a solvable Lie algebra. **80h:17011**

Réduction de produits semi-directs et conjecture de Gel'fand et Kirillov. (English summary) **80i:17013**

Prischepionok, Serge Topologie naturelle pour les représentations linéaires des algèbres de Lie semi-simples. (English summary) **80j:17007**

Schmüdgen, Konrad Positive cones in enveloping algebras. **80g:17006**

Ein positives Element der einhüllenden Algebra der $\mathfrak{sl}(2, R)$, das keine Quadratsumme ist. **80c:17012**

Small, Lance W. *See* **Joseph, Anthony, 80j:17005**

Tauvel, Patrice Sur les quotients premiers de l'algèbre enveloppante d'une algèbre de Lie résoluble. **80a:17010**

Ufnarovskiĭ, V. A. The growth of algebras. (Russian. English summary) **80a:17011**

de Vries, H. *See* **van den Hombergh, Adolf, 80c:17011**

Yamuna, Sieluan Extension des scalaires dans des algèbres universelles. (English summary) **80d:17011**

Secondary classifications:

Alev, Jack Systèmes de générateurs normalisants. **(80e:16020)**

Arnal, Didier Analytic vectors and irreducible representations of nilpotent Lie groups and algebras. **(80i:22024)**

Berman, S. D. (*with* Moody, Robert V.) Lie algebra multiplicities. **(80h:17013)**

Block, Richard E. Classification of the irreducible representations of $\mathfrak{sl}(2, \mathbf{C})$. **(80i:17008)**

Chamarie, Marc ★Sur les ordres maximaux au sens d'Asano. **(80k:16011)**

van Deuren, Jean-Pierre Étude du degré de transcendance des sous-corps commutatifs des corps de fractions des anneaux d'opérateurs différentiels à coefficients dans un corps commutatif de caractéristique nulle. (English summary) **(80a:12026)**

Garland, Howard The arithmetic theory of loop algebras. **(80a:17012)**

Lorenz, Martin The heart of prime ideals in Ore extensions. **(80i:16004)**

Moody, Robert V. *See* **Berman, S. D., (80h:17013)**

Rudakov, A. N. Local universal algebras and reducible representations of Lie algebras. (Russian) **(80d:17007)**

Strömbeck, Peter On left ideals in A_1 and their associated graded ideals. **(80f:16002)**

17B40 Automorphisms, derivations, other operators

Heinze, Joachim Die Automorphismen und die Invarianzgruppe der Algebra der konvergenten Potenzreihen eines Banachraumes. **80m:17005**

Hilmi, Zargouni Sur les dérivations de certains produits semi-directs. (English summary) **80k:17008**

Kowalski, Oldřich On unitary automorphisms of solvable Lie algebras. **80j:17008**

Tzung, Fu Chien On semigroups of endomorphisms of biregular algebras. **80e:17007**

Winter, David J. A note on the conjugacy of Cartan subalgebras. **80j:17009**

Secondary classifications:

Djoković, Dragomir Ž. Derivations and automorphisms of exterior algebras. **(80a:15031)**

Hurley, T. C. Intersections of terms of polycentral series of free groups and free Lie algebras. **(80m:20035)**

Lecomte, Pierre-Claude Derivations of linear endomorphisms of the tangent bundle. (French summary) **(80i:58008)**

Lichnerowicz, André Déformations d'algèbres associées à une variété symplectique. (Italian summary) **(80h:58026)**

Lichtman, A. I. The primitivity of free products of associative algebras. **(80g:16003)**

17B45 Lie algebras of linear algebraic groups [See also 14Lxx and 20Gxx.]

Winter, David J. Solvable subgroups and their Lie algebras in characteristic p. **80j:17010**

Secondary classifications:

Ballard, John W. Injective modules for restricted enveloping algebras. **(80b:20053)**

Nichols, Warren D. Pointed irreducible bialgebras. **(80g:16010)**

Sullivan, John Brendan The representative functions on the hyperalgebra. **(80m:14029)**

17B50 Modular Lie algebras

Delotkazin, A. H. Irreducible representations of a simple three-dimensional Lie algebra of characteristic $p = 2$. (Russian) **80b:17008**

Kryljuk, Ja. S. Modules over Lie algebras that permit the first Cartan prolongation. (Russian) **80h:17012**

Strade, Helmut Darstellungen auflösbarer Lie-p-Algebren. **80b:17009**

Winter, David J. Triangulable subalgebras of Lie p-algebras. **80i:17014**

Secondary classifications:

Weisfeiler, B. On the structure of the minimal ideal of some graded Lie algebras in characteristic $p > 0$. **(80b:17011)**

Winter, David J. Solvable subgroups and their Lie algebras in characteristic p. **(80j:17010)**

17B55 Homological methods in Lie algebras

Secondary classifications:

Kõiv, M. (*with* Loide, R.-K.) First-order power-associative deformation of Pauli algebra. (Russian summary) **(80i:17001)**

Loide, R.-K. *See* **Kõiv, M., (80i:17001)**

Mazzocco, Renzo More on the characteristic ring of extensions of Lie algebras. (Italian. English summary) **(80m:57017)**

17B56 Cohomology of Lie algebras

Berman, S. D. On the low-dimensional cohomology of some infinite-dimensional simple Lie algebras. **80k:17009**

Tarazona Ferrer, D. ★Homología respecto a una variedad de álgebras de Lie. (Spanish) [Homology with respect to a variety of Lie algebras] **80c:17013**

Secondary classifications:

Avez, André (*with* Heslot, André) L'algèbre de Lie des polynômes en les coordonnées canoniques munie du crochet de Poisson. (English summary) **(80j:58040)**

Grünenfelder, Luzius On the homology of filtered and graded rings. **(80i:16034)**

Heslot, André *See* **Avez, André, (80j:58040)**

Löfwall, Clas Une algèbre nilpotente dont la série de Poincaré-Betti est non rationnelle. (English summary) **(80e:16016)**

Vale Gonsalves, M. J. Cohomology of Lie groups and Lie algebras. (Spanish) **(80h:18011)**

17B60 Lie rings associated with other structures (associative, Jordan, etc.) [See also 15A30, 16A68, 17C40, 17C50.]

Marmazeev, V. I. The structure of general triple Lie systems. (Russian) **80b:17010**

Secondary classifications:

Karasev, M. V. Operators of the regular representation for a class of non-Lie commutation relations. (Russian) **(80k:47051)**

Kõiv, M. (*with* Loide, R.-K.) First-order power-associative deformation of Pauli algebra. (Russian summary) **(80i:17001)**

Loide, R.-K. *See* **Kõiv, M., (80i:17001)**

Myung, Hyo Chul *See* **Okubo, Susumu, (80i:17002)**

Okubo, Susumu (*with* Myung, Hyo Chul) On the classification of simple flexible Lie-admissible algebras. **(80i:17002)**

Wall, G. E. Lie methods in group theory. **(80h:20057)**

17B65 Infinite-dimensional Lie algebras [See also 22E65.]

Bahturin, Ju. A. ★Lectures on Lie algebras. **80c:17014**

Berman, S. D. (*with* Moody, Robert V.) Lie algebra multiplicities. **80h:17013**

Garland, Howard The arithmetic theory of loop algebras. **80a:17012**

Heinze, Joachim Über die rechts-symmetrische Algebra und die Lie-Algebra der konvergenten Potenzreihen eines Banachraumes. **80g:17007**

Ikeda, Toshiharu (*with* Kashiwagi, Yoshimi) Some properties of hypercentral Lie algebras. **80c:17015**

(*with* Kashiwagi, Yoshimi) Extension theorems on some generalized nilpotent Lie algebras. **80c:17016**

Chain conditions for abelian, nilpotent and soluble ideals in Lie algebras. **80j:17011**

Kashiwagi, Yoshimi *See* **Ikeda, Toshiharu, 80c:17015** *and* **Ikeda, Toshiharu, 80c:17016**

Kostrikin, I. A. Irreducible graded representations of Lie algebras of Cartan type. (Russian) **80a:17013**

Moody, Robert V. *See* **Berman, S. D., 80h:17013**

de Ruiter, J. Split extensions of Lie algebras. **80c:17017**

Stewart, Ian Lie algebras having large Cartan subalgebras. **80h:17014**

Tjurin, S. A. The classification of deformations of a special Lie algebra of Cartan type. (Russian) **80k:17010**

Tôgô, Shigeaki Maximal conditions for ideals in Lie algebras. **80j:17012**

Tokarenko, A. I. Engel groups and Lie algebras. (Russian) **80k:17011**

Tolokonnikov, G. K. Hamiltonian algebras. (Russian. English summary) **80i:17015**

Viennot, Gérard ★Algèbres de Lie libres et monoïdes libres. **80i:17016**

Secondary classifications:

Baumgarte, Joachim Das Oszillator-Kepler Problem und die Lie-Algebra. **(80b:70020)**

Bayen, François On the convergence of the Zassenhaus formula. **(80h:22022)**

Berman, S. D. On the low-dimensional cohomology of some infinite-dimensional simple Lie algebras. **(80k:17009)**

Fuks, D. B. Cohomology of infinite-dimensional Lie algebras and characteristic classes of foliations. (Russian) **(80g:57039)**

Karasev, M. V. Operators of the regular representation for a class of non-Lie commutation relations. (Russian) **(80k:47051)**

Kostrikin, I. A. Representations of height 1 of infinite-dimensional Lie algebras of the series K_n. (Russian) **(80g:17003)**

Lecomte, Pierre-Claude Sur l'algèbre de Lie des automorphismes infinitésimaux du fibré tangent. (English summary) **(80d:58027)**

Lichnerowicz, André Existence and equivalence of twisted products on a symplectic manifold. **(80m:58043)**

Lovelace, C. Systematic search for ghost-free string models. **(80j:81085)**

Mosolova, M. V. A new formula for $\ln(e^A e^B)$ in terms of the commutators of the elements A and B. (Russian) **(80b:46058)**

Palev, Čavdar A causal A-statistics. **(80j:81063)**

Sharan, Pankaj Star-product representation of path integrals. **(80k:81046)**
Stieglitz, Andreas Cohomology theory of Dynkin algebras and Lie groups. **(80d:57025)**

17B70 Graded Lie algebras

Bednář, Miroslav (*with* Šachl, Vladimír F.) Contribution to the theory of the finite-dimensional representations of the semi-simple graded Lie algebras. **80e:17008**
(*with* Šachl, Vladimír F.) Classification and construction of finite-dimensional irreducible representations of the graded algebras; application to the $(Sp(2n); 2n)$ algebra. **80e:17009**
Berezin, F. A. (*with* Retah, V. S.) Construction of Lie superalgebras with a semisimple even part. (Russian. English summary) **80h:17015**
Kac, V. G. Representations of classical Lie superalgebras. **80f:17006**
Retah, V. S. *See* **Berezin, F. A., 80h:17015**
Rittenberg, V. A guide to Lie superalgebras. **80d:17012**
Šachl, Vladimír F. *See* **Bednář, Miroslav, 80e:17008** *and* **Bednář, Miroslav, 80e:17009**
Šapovalov, A. V. Finite-dimensional irreducible representations of Hamiltonian Lie superalgebras. (Russian) **80h:17016**
Scheunert, Manfred Generalized Lie algebras. **80f:17007**
Weisfeiler, B. On the structure of the minimal ideal of some graded Lie algebras in characteristic $p>0$. **80b:17011**

Secondary classifications:

Bernstein, J. N. (*with* Leites, D. A.) Irreducible representations of finite-dimensional Lie superalgebras of series W and S. **(80j:17002)**
Borovskiĭ, Ju. V. Two-sided closed ideals in the superenveloping algebra of the Lie algebra sl(2, C). (Russian) **(80h:17010)**
Djoković, Dragomir Ž. Derivations and automorphisms of exterior algebras. **(80a:15031)**
Howe, Paul Super Weyl transformations in two dimensions. **(80b:81088)**
Jagannathan, R. (*with* Vasudevan, R.) Representations of a para-Bose algebra using only a single Bose field. **(80h:81039a)**
(*with* Vasudevan, R.) Erratum: "Representations of a para-Bose algebra using only a single Bose field" [J. Math. Phys. **20** (1979), no. 3, 390–392; MR 80h:81039a]. **(80h:81039b)**
Jarvis, P. D. A parafermion generalization of Poincaré supersymmetry. **(80b:81123)**
Jha, Dhirendra Kumar A general commutator equation in the algebra of spin operators. **(80c:81048)**
Leites, D. A. *See* **Bernstein, J. N., (80j:17002)**
Nakanishi, Noboru A new way of describing the Lie algebras encountered in quantum field theory. **(80d:81077)**
Paiev, Čavdar Lie-superalgebraical approach to the second quantization. **(80k:81061)**
Tjurin, S. A. The classification of deformations of a special Lie algebra of Cartan type. (Russian) **(80k:17010)**
Vasudevan, R. *See* **Jagannathan, R., (80h:81039a)** *and* **Jagannathan, R., (80h:81039b)**
Zumino, B. Some recent developments in supergravity. **(80g:83030)**

17B99 None of the above, but in this section

Kukin, G. P. Algorithmic problems for solvable Lie algebras. (Russian) **80h:17017**
Varea, Vicente R. Local formations of Lie algebras. f-nonideal, maximal subalgebras in L. (Spanish. English summary) **80i:17017**

Secondary classifications:

Barratt, M. G. Twisted Lie algebras. **(80d:55017)**
Musès, C. Hypernumbers. II. Further concepts and computational applications. **(80a:03007)**

17Cxx Jordan algebras (commutative)

Secondary classifications:

Šestakov, I. P. *See* **Ževlakov, K. A.; et al., (80h:17002)**
Širšov, A. I. *See* **Ževlakov, K. A.; et al., (80h:17002)**
Slin'ko, A. M. *See* **Ževlakov, K. A.; et al., (80h:17002)**
Ževlakov, K. A. (*with* Slin'ko, A. M.; Šestakov, I. P.; Širšov, A. I.) ★Кольца, близкие к ассоциативным. (Russian) [Rings that are nearly associative] **(80h:17002)**

17C05 Identities

17C10 Structure theory

Bix, Robert Separable Jordan algebras over commutative rings. I. **80i:17018**
Koecher, Max Eine Konstruktion von Jordan-Algebren. (English summary) **80a:17014**
Kühn, Oda (*with* Rosendahl, Adelheid) Wedderburnzerlegung für Jordan-Paare. (English summary) **80e:17010**
Rich, Michael Some radical properties of Jordan matrix rings. **80h:17018**
Rosendahl, Adelheid *See* **Kühn, Oda, 80e:17010**

Secondary classifications:

Bonsall, F. F. Jordan subalgebras of Banach algebras. **(80i:46039)**
Thedy, Armin Right alternative algebras and Wedderburn principal theorem. **(80m:17001)**
Youngson, M. A. Equivalent norms on Banach Jordan algebras. **(80i:46049)**

17C15 Representations

17C20 Simple, semisimple algebras

17C25 Universal enveloping algebras

17C30 Automorphisms, derivations, other operators

17C35 Formally real domains of positivity [See also 32Nxx.]

Dorfmeister, Josef (*with* Koecher, Max) Reguläre Kegel. **80i:17019**
Peirce-Zerlegungen und Jordan-Strukturen zu homogenen Kegeln. **80k:17012**
Koecher, Max *See* **Dorfmeister, Josef, 80i:17019**
Loos, Ottmar On algebraic groups defined by Jordan pairs. **80i:17020**
Rothaus, O. S. Ordered Jordan algebras. **80a:17015**
Tillier, A. Quelques applications géométriques des algèbres de Jordan. **80c:17018**
Les groupes de transvections des espaces symétriques associés à une algèbre de Jordan de forme réelle. **80c:17019**

Secondary classifications:

Dorfmeister, Josef Inductive construction of homogeneous cones. **(80h:32059)**
Algebraic description of homogeneous cones. **(80j:53049)**

17C40 Exceptional Jordan algebras and associated Lie groups

Secondary classifications:

Kimura, Yoshio A hypersurface of the irreducible Hermitian symmetric space of type E III. **(80h:32061)**

17C45 Homological methods in Jordan algebras

17C46 Cohomology of Jordan algebras

17C50 Jordan rings associated with other structures [See also 16A68, 17B60.]

Smith, Bruce D. An application of nonstandard model theory. **80i:17021**

Secondary classifications:

Loos, Ottmar Homogeneous algebraic varieties defined by Jordan pairs. **(80i:17022)**
Rich, Michael On alternate rings and their attached Jordan rings. **(80h:17012)**

17C65 Infinite-dimensional Jordan algebras

Secondary classifications:

Béllissard, Jean (*with* Iochum, Bruno) Homogeneous self-dual cones, versus Jordan algebras. The theory revisited. (French summary) **(80h:46082)**
(*with* Iochum, Bruno) L'algèbre de Jordan d'un cône autopolaire facialement homogène. (English summary) **(80c:46056)**
Bonsall, F. F. Jordan subalgebras of Banach algebras. **(80i:46039)**
Edwards, C. M. On the facial structure of a JB-algebra. **(80e:46033)**
On the centres of hereditary JBW-subalgebras of JBW-algebra. **(80d:46094)**
Iochum, Bruno *See* **Béllissard, Jean, (80h:46082)** *and* **Béllissard, Jean, (80c:46056)**
Martinez Moreno, J. JV-algebras. **(80m:46050)**
Youngson, M. A. Equivalent norms on Banach Jordan algebras. **(80i:46049)**
Hermitian operators on Banach Jordan algebras. **(80j:46090)**

17C99 None of the above, but in this section

Loos, Ottmar Homogeneous algebraic varieties defined by Jordan pairs. **80i:17022**
Watson, Kym S. Linear fractional maps and Jordan algebras. **80f:17008**

17Dxx Other nonassociative rings and algebras

Secondary classifications:

Šestakov, I. P. *See* **Ževlakov, K. A.; et al., (80h:17002)**
Širšov, A. I. *See* **Ževlakov, K. A.; et al., (80h:17002)**
Slin'ko, A. M. *See* **Ževlakov, K. A.; et al., (80h:17002)**
Ževlakov, K. A. (*with* Slin'ko, A. M.; Šestakov, I. P.; Širšov, A. I.) ★Кольца, близкие к ассоциативным. (Russian) [Rings that are nearly associative] **(80h:17002)**

17D05 Alternative rings

Filippov, V. T. A generalization of alternative algebras and Mal'cev algebras. (Russian) **80a:17016**
Kleinfeld, Erwin On centers of alternative algebras. **80h:17013**
Laffey, Thomas J. Commutative R-subalgebras of R-infinite R-algebras and the Schmidt problem for R-algebras. **80j:17013**
Legrand, Denise *See* **Legrand, Solange, 80c:17020**
Legrand, Solange (*with* Legrand, Denise) Sur les algèbres sur un anneau R munies d'une forme multiplicative de degré n tel que $[\frac{n}{2}]!$ soit régulier dans R. **80c:17020**
L'vov, I. V. Varieties generated by finite alternative rings. (Russian) **80g:17008**
Puczyłowski, Edmund R. On lower strong radicals in alternative algebras. **80a:17017**
Rich, Michael On alternate rings and their attached Jordan rings. **80h:17012**

Secondary classifications:

Kleinfeld, Erwin (*with* Smith, Harry F.) Prime locally $(-1, 1)$ rings with chain condition. **(80c:17002a)**
Musès, C. Hypernumbers and quantum field theory with a summary of physically

applicable hypernumber arithmetics and their geometries. (80k:83031)
Petri, J. Une représentation matricielle quaternionique de l'algèbre de Dirac-Clifford et celle de Cayley. (80m:15009)
Pokrass, David Solvability and nilpotency in generalized alternative rings. (80c:17003)
Rose, Bruce I. Rings which admit elimination of quantifiers. (80e:03036a)
Corrigendum: "Rings which admit elimination of quantifiers" (J. Symbolic Logic 43 (1978), no. 1, 92–112). (80e:03036b)
Smith, Harry F. Finite-dimensional locally $(-1, 1)$ algebras. (80e:17002b)
See also **Kleinfeld, Erwin,** (80e:17002a)

17D10 Mal'cev rings

Anderson, Tim (*with* Kleinfeld, Erwin) Semisimple nil algebras of type δ. 80b:17013
Filippov, V. T. The Lie center of binary Lie algebras. (Russian) 80j:17014
Grishkov, A. N. On the theory of finite-dimensional binary Lie algebras. (Russian) 80j:17015
Kleinfeld, Erwin *See* **Anderson, Tim,** 80b:17013

Secondary classifications:

Abbasov, N. T. Automorphisms and anti-automorphisms of biquasisimple algebras. (Russian. Azerbaijani summary) (80j:16006)
Carlsson, Renate On the exceptional central simple non-Lie Mal'cev algebras. (80a:17001)

17D99 None of the above, but in this section

Secondary classifications:

Fleischer, A. Reductive homogeneous spaces and nonassociative algebras. (Russian. Estonian and English summaries) (80a:53056)
Heuch, Ivar Genetic algebras considered as elements in a vector space. (80a:92036)
Röhrl, Helmut On the zeros of polynomials over arbitrary finite-dimensional algebras. (80g:16022)

18–XX CATEGORY THEORY, HOMOLOGICAL ALGEBRA

18–01 Elementary exposition, textbooks

Hilton, Peter Vector spaces, abelian groups and groups: similarities and differences. 80d:18001
Popescu, Liliana *See* **Popescu, Nicolae,** 80i:18001
Popescu, Nicolae (*with* Popescu, Liliana) ★Theory of categories. 80i:18001
Richter, Günther ★Kategorielle Algebra. 80f:18001
Rotman, Joseph J. ★An introduction to homological algebra. 80k:18001
Semadeni, Zbigniew (*with* Wiweger, Antoni) ★Wstęp do teorii kategorii i funktorów. (Polish) [Introduction to the theory of categories and functors] 80k:18002
Wiweger, Antoni *See* **Semadeni, Zbigniew,** 80k:18002

18–02 Advanced exposition (research surveys, monographs, etc.)

18–03 Historical (must also be assigned at least one classification number from Section 01)

18–04 Explicit machine computation and programs (not the theory of computation or programming)

18–06 Proceedings, conferences, etc.

(Fourman, Michael P.) *See* **Applications of sheaves,** 80j:18001
(Herrlich, Horst) *See* **Categorical topology,** 80f:18002
(Kock, Anders) *See* **Topos theoretic methods in geometry,** 80i:18002
(Mulvey, Christopher J.) *See* **Applications of sheaves,** 80j:18001
(Preuss, Gerhard) *See* **Categorical topology,** 80f:18002
(Scott, Dana S.) *See* **Applications of sheaves,** 80j:18001
Applications of sheaves ★Applications of sheaves. 80j:18001
Berlin *See* **Categorical topology,** 80f:18002
Categorical topology ★Categorical topology. 80f:18002
Conference:
Categorical Topology *See* **Categorical topology,** 80f:18002
Durham *See* **Applications of sheaves,** 80j:18001
Sheaf theory *See* **Applications of sheaves,** 80j:18001
Symposium:
Applications of Sheaf Theory to Logic, Algebra and Analysis *See* **Applications of sheaves,** 80j:18001
Topology *See* **Categorical topology,** 80f:18002
Topos theoretic methods in geometry ★Topos-theoretic methods in geometry. 80i:18002

Secondary classifications:

(Milgram, R. James) *See* **Algebraic and geometric topology,** (80d:57001a) *and* **Algebraic and geometric topology,** (80d:57001b)
Algebraic and geometric topology ★Algebraic and geometric topology. Part 1. (80d:57001a)
★Algebraic and geometric topology. Part 2. (80d:57001b)
Geometric topology *See* **Algebraic and geometric topology,** (80d:57001a) *and* **Algebraic and geometric topology,** (80d:57001b)
Proceedings of Symposia in Pure Mathematics *See* **Algebraic and geometric topology,** (80d:57001a) *and* **Algebraic and geometric topology,** (80d:57001b)
Stanford, Calif. *See* **Algebraic and geometric topology,** (80d:57001a) *and* **Algebraic and geometric topology,** (80d:57001b)
Summer Research Institute:
American Mathematical Society *See* **Algebraic and geometric topology,** (80d:57001a) *and* **Algebraic and geometric topology,** (80d:57001b)

18Axx General theory of categories and functors

18A05 Definitions, generalizations

Hasse, Maria Zu Theorie der n-Kategorien. 80b:18001
Hinkova-Garipova, D. S. A study of the axiomatic system of an n-category. (Bulgarian. Russian and English summaries) 80m:18001
Zaporowski, Eugeniusz Basic properties of the category of abstract objects. (Polish. Russian and English summaries) 80i:18003

18A10 Graphs, diagram schemes, precategories, neocategories [See also 20Lxx.]

18A15 Foundations, relations to logic and deductive systems [See also 03–XX.]

Secondary classifications:

Blanc, Georges Équivalence naturelle et formules logiques en théorie des catégories. (80m:03109)
Cartier, Pierre Logique, catégories et faisceaux [d'après F. Lawvere et M. Tierney]. (80m:03111)
van Dalen, D. Interpreting intuitionistic logic. (80m:03093)
Kühnrich, Martin Superclasses in a finite extension of Zermelo set theory. (80f:03056)
(Lawvere, F.) *See* **Cartier, Pierre,** (80m:03111)
Scott, Philip J. The "Dialectica" interpretation and categories. (80m:03091)
(Tierney, M.) *See* **Cartier, Pierre,** (80m:03111)
Ţurlea, Marin Category theory and the foundations of mathematics. (Romanian) (80g:03009)

18A20 Epimorphisms, monomorphisms, special classes of morphisms, null morphisms, factorization (bicategories)

Enjalbert, Patrice Épimorphismes: quelques résultats algébriques et logiques. (English summary) 80j:18002
Gómez Pardo, J. L. Functional nilpotence. (Spanish) 80a:18001
Hoffmann, Rudolf-E. Factorization of cones. 80j:18003
Huq, Syed A. Discussion of the condition "monics are equalizers" implies "epis are surjectives" in categories. 80b:18002

Secondary classifications:

Gardner, B. J. A note on ring epimorphisms and polynomial identities. (80e:16013)
Terlikowska-Osłowska, Barbara Radical and semisimple classes of objects in categories with a self-dual set of axioms. (Russian summary) (80a:18010)

18A22 Special properties of functors (faithful, full, etc.)

Belcastro, Alessandro (*with* Margiocco, Marco) $B\theta$-categories and θ-functors. 80g:18001
Margiocco, Marco *See* **Belcastro, Alessandro,** 80g:18001

18A23 Natural morphisms, dinatural morphisms

18A25 Functor categories, comma categories

Kacov, E. B. The tensor product of functors. (Russian) 80d:18002
Naudé, Gert A structure theory for a category of behaviours. 80i:18004

Secondary classifications:

Brune, Hermann Some left pure semisimple ringoids which are not right pure semisimple. (80k:18018)
Fuller, Kent R. (*with* Hullinger, Harlan) Rings with finiteness conditions and their categories of functors. (80a:16026)
Hullinger, Harlan *See* **Fuller, Kent R.,** (80a:16026)
Wood, R. J. $\underline{V}$-indexed categories. (80j:18012)

18A30 Limits and colimits (products, sums, directed limits, pushouts, fiber products, equalizers, kernels, ends and coends, etc.)

Assem, I. A. (*with* Chehata, C. G.; El-Gendy, M.) Limits of bifunctors into a category. 80i:18005
Chehata, C. G. *See* **Assem, I. A.; et al.,** 80i:18005
Day, Brian J. Note on duality of Kellyspace products. 80i:18006
El-Gendy, M. *See* **Assem, I. A.; et al.,** 80i:18005
Yutani, Hiroshi Coequalizer in the category of BCK-algebras. 80b:18003

Secondary classifications:

Andréka, Hajnal (*with* Makai, E., Jr.; Márki, L.; Németi, István) Reduced products in categories. (80h:03049)
Day, Brian J. Duality in topological algebra. (80c:18005a)
Addendum: "Duality in topological algebra" (Bull. Austral. Math. Soc. 18 (1978), no. 3, 475–480). (80c:18005b)

On profiniteness of compact totally disconnected algebras. **(80j:08004)**
Makai, E., Jr. *See* **Andréka, Hajnal; et al., (80h:03049)**
Márki, L. *See* **Andréka, Hajnal; et al., (80h:03049)**
Naudé, Gert A structure theory for a category of behaviours. **(80i:18004)**
Németi, István *See* **Andréka, Hajnal; et al., (80h:03049)**

18A32 Factorization of morphisms (via images, coimages, dominions, codominions), substructures, quotient structures, congruences, amalgams

Harvey, J. Martin Topological functors from factorization. **80j:18004**
Nakagawa, Ryosuke A note on (E, M)-functors. **80i:18007**
Otal Cinca, Javier Functorial characterization of categorical duality of R- and N-closed classes. (Spanish. English summary) **80g:18002**

18A35 Categories admitting limits (complete categories), functors commuting with limits, continuous functors, completions

Koubek, Václav (*with* Reiterman, Jan) Categorical constructions of free algebras, colimits, and completions of partial algebras. **80g:18003**
Reiterman, Jan *See* **Koubek, Václav, 80g:18003**

Secondary classifications:

Adámek, Jiří (*with* Herrlich, Horst; Strecker, George E.) Least and largest initial completions. I, II. **(80f:18009)**
Day, Brian J. (*with* Laplaza, M. L.) On embedding closed categories. **(80e:18003)**
Herrlich, Horst *See* **Adámek, Jiří; et al., (80f:18009)**
Laplaza, M. L. *See* **Day, Brian J., (80e:18003)**
Nakagawa, Ryosuke A note on (E, M)-functors. **(80i:18007)**
Strecker, George E. *See* **Adámek, Jiří; et al., (80f:18009)**

18A40 Adjoint functors (representable functors, universal constructions, reflective subcategories, reflections, etc.), constructions of adjoints (Kan extensions, etc.)

Balcerzyk, Stanisław Some Kan extensions of non-additive functors. **80c:18002**
Botnaru, D. V. Existence of a left adjoint to an embedding functor. (Russian) **80i:18008**
Cho, Yong Seung On reflective subcategories. **80c:18001**
Diers, Yves Spectres et localisations relatifs à un foncteur. (English summary) **80c:18003**
Frei, Armin (*with* Kleisli, Heinrich) A question in categorical shape theory: when is a shape-invariant functor a Kan extension? **80k:18003**
Kleisli, Heinrich *See* **Frei, Armin, 80k:18003**
Marny, Thomas On epireflective subcategories of topological categories. **80g:18004**
Paré, Robert (*with* Schumacher, Dietmar) Abstract families and the adjoint functor theorems. **80b:18004**
Schumacher, Dietmar *See* **Paré, Robert, 80b:18004**
Tholen, Walter Zum Satz von Freyd und Kelly. **80d:18003**
Wilson, William H. On induced representations of Lie algebras, groups and coalgebras. **80b:18001**

Secondary classifications:

Botnaru, D. V. p-reflexive subcategories. (Russian) **(80f:18004)**
Lindner, Harald Adjunctions in monoidal categories. **(80i:18014)**
Reynolds, George D. (*with* Rice, Michael D.) Completeness and covering properties of uniform spaces. **(80i:54035)**
Rice, Michael D. *See* **Reynolds, George D., (80i:54035)**
Tholen, Walter Semitopological functors. I. **(80k:18012a)**
(*with* Wischnewsky, Manfred B.) Semitopological functors. II. External characterizations. **(80k:18012b)**
Wischnewsky, Manfred B. Structure functors—representation and existence theorems. **(80m:18003)**
See also **Tholen, Walter, (80k:18012b)**
Wolff, Harvey Free monads and the orthogonal subcategory problem. **(80b:18007)**

18A99 None of the above, but in this section

Gómez Pardo, J. L. (*with* Rodríguez González, N.) c-preradicals and pre-interiors of a category. (Spanish) **80j:18005**
Herrlich, Horst (*with* Salicrup López, Graciela; Vázquez, R.) Dispersed factorization structures. **80j:18006**
Klein, Aaron Injectives and simple objects. **80g:18005**
Rodríguez González, N. *See* **Gómez Pardo, J. L., 80j:18005**
Salicrup López, Graciela *See* **Herrlich, Horst; et al., 80j:18006**
Vázquez, R. *See* **Herrlich, Horst; et al., 80j:18006**

Secondary classifications:

Bjal'skiĭ, M. A. Operations in game categories. (Russian) **(80j:90128)**

18Bxx Special categories

Secondary classifications:

Matthiessen, G. A heterogeneous algebraic approach to some problems in automata theory, many-valued logic and other topics. **(80h:68050)**

18B05 Category of sets, characterizations [See also 03–XX.]

Kastl, Jan Innere Translationen der kleinen Kategorien. (Russian and English summaries) **80i:18009**

18B10 Category of relations, additive relations

Arakeljan, A. A. Minimal two-sided ideals in a partial semigroup of homomorphisms of relatives. (Russian. Armenian summary) **80d:18004**

Secondary classifications:

Asano, Chooichiro *See* **Tanaka, Yutaka, (80i:65043a); Tanaka, Yutaka, (80i:65043b)** *and* **Tanaka, Yutaka; et al., (80i:65043c)**
Kubota, Nobuko *See* **Tanaka, Yutaka; et al., (80i:65043c)**
Tanaka, Yutaka (*with* Asano, Chooichiro) A generalized method of optimal scaling for partially ordered categories. **(80i:65043a)**
(*with* Asano, Chooichiro) On some basic properties of optimal scaling for ordered categories. **(80i:65043b)**
(*with* Asano, Chooichiro; Kubota, Nobuko) A generalized method of optimal scaling for multiple responses with ordered categories. **(80i:65043c)**

18B15 Imbedding theorems, universal categories [See also 18E20.]

Kollár, János Some subcategories of integral domains. **80d:18005**

18B20 Categories of machines, automata, operative categories [See also 03D05, 68Dxx, 68F10.]

Arbib, Michael A. (*with* Manes, Ernest G.) Intertwined recursion, tree transformations, and linear systems. **80e:18001**
Ehrig, Hartmut (*with* Kühnel, Wolfgang) Categorical approach to nonlinear constant continuous-time systems. (French summary) **80k:18004**
Kawahara, Yasuo (*with* Yamaguchi, Meiri) On the minimal realization and the category of response for state-behavior machines. **80k:18005**
Kühnel, Wolfgang *See* **Ehrig, Hartmut, 80k:18004**
Manes, Ernest G. *See* **Arbib, Michael A., 80e:18001**
Naudé, Gert A note on subcategories of reachable machines. **80b:18005**
Yamaguchi, Meiri *See* **Kawahara, Yasuo, 80k:18005**

Secondary classifications:

Ehrig, Hartmut (*with* Kreowski, Hans-Jörg; Maggiolo-Schettini, Andrea; Rosen, Barry K.; Winkowski, Józef) Deriving structures from structures. **(80d:68036)**
(*with* Rosen, Barry K.) Concurrency of manipulations in multidimensional information structures. **(80f:68031)**
Kreowski, Hans-Jörg *See* **Ehrig, Hartmut; et al., (80d:68036)**
Maggiolo-Schettini, Andrea *See* **Ehrig, Hartmut; et al., (80d:68036)**
Peeva, K. G. *See* **Topenčarov, Vladimir V., (80k:68043)**
Plotkin, G. T^{ω} as a universal domain. **(80d:68105)**
Rosen, Barry K. *See* **Ehrig, Hartmut; et al., (80d:68036)** *and* **Ehrig, Hartmut, (80f:68031)**
Šedivá-Trnková, Věra Behaviour of machines in categories. **(80e:68152)**
Topenčarov, Vladimir V. (*with* Peeva, K. G.) Mathematical theory of automata—a categorical approach. (Russian) **(80k:68043)**
Wätjen, Dietmar Categorical theory of the simulation of automata and of their transition monoids. (German, Russian and French summaries) **(80a:68063)**
Winkowski, Józef *See* **Ehrig, Hartmut; et al., (80d:68036)**

18B25 Topoi [See also 03G25.]

Bunge, Marta C. Erratum: "Topos theory and Souslin's hypothesis" (J. Pure Appl. Algebra 4 (1974), 159–187). **80d:18006**
Farina, M. F. (*with* Meloni, G. C.) The associated sheaf functor in topoi. The construction X^{+}. (Italian. English summary) **80b:18006**
Haigh, John Essential geometric morphisms between toposes over finite sets. **80k:18006**
Johnstone, P. T. (*with* Linton, F. E. J.; Paré, Robert) Injectives in topoi. II. Connections with the axiom of choice. **80j:18007b**
Automorphisms of Ω. **80f:18003**
On a topological topos. **80i:18010**
Linton, F. E. J. (*with* Paré, Robert) Injectives in topoi. I. Representing coalgebras as algebras. **80j:18007a**
See also **Johnstone, P. T.; et al., 80j:18007b**
Meloni, G. C. *See* **Farina, M. F., 80b:18006**
Nel, Louis D. Convenient topological algebra and reflexive objects. **80j:18008**
Paré, Robert *See* **Linton, F. E. J., 80j:18007a** *and* **Johnstone, P. T.; et al., 80j:18007b**
Rousseau, Christiane Nombres réels et complexes dans les topos spatiaux. **80c:18004**
Stout, Lawrence Neff Quels sont les espaces topologiques dans les topos? **80d:18007**

Secondary classifications:

Calude, Cristian On the category of recursive languages. **(80h:03056)**
Categorical methods in computability. I. Recursive and nonprimitive recursive functions. (Romanian. English summary) **(80m:03110a)**
Categorical methods in computability. II. (Romanian. English summary) **(80m:03110b)**
Coste, Michel *See* **Coste-Roy, Marie-Françoise, (80m:03112)** *and* **Coste-Roy, Marie-Françoise, (80m:14002)**
Coste-Roy, Marie-Françoise (*with* Coste, Michel) The generic model of an e-stable geometric extension of the theory of rings is of line type. **(80m:03112)**
(*with* Coste, Michel) Topologies for real algebraic geometry. **(80m:14002)**
Harvey, J. Martin Topological functors from factorization. **(80j:18004)**
Loullis, George Infinite forcing for Boolean valued models. **(80f:03042)**
Rosebrugh, Robert Coequalizers in algebras for an internal type. **(80m:03114)**

18B30 Categories of topological spaces and continuous mappings [See also 54–XX.]

Botnaru, D. V. *p*-reflexive subcategories. (Russian) **80f:18004**
Gisli, Eraldo Final topologies and coreflexivity. (Italian. English summary) **80m:18002**
Preuss, Gerhard Connection properties in topological categories and related topics. **80j:18009**
Vainio, Reino The locally connected and the uniformly locally connected coreflector in general convergence theory. **80j:18010**

Secondary classifications:

Adámek, Jiří (*with* Herrlich, Horst; Strecker, George E.) Least and largest initial completions. I, II. **(80f:18009)**
Arakeljan, A. A. Minimal two-sided ideals in a partial semigroup of homomorphisms of relatives. (Russian. Armenian summary) **(80d:18004)**
Brümmer, G. C. L. Two procedures in bitopology. **(80k:54055)**
Day, Brian J. Note on duality of Kellyspace products. **(80i:18006)**
Gonshor, Harry An application of nonstandard analysis to category theory. **(80k:54090)**
Hasuo, Yutaka On a Cartesian closed category. **(80c:54022)**
Herrlich, Horst *See* **Adámek, Jiří; et al., (80f:18009)**
Lüschow, Rainer Bodo Categories of statistic-metric spaces (a co-universal construction). **(80i:54011)**
Nel, Louis D. Convenient topological algebra and reflexive objects. **(80j:18008)**
Semadeni, Zbigniew (*with* Zidenberg-Spirydonow, H.) Functors on categories of ordered topological spaces. **(80m:54016)**
Simmons, H. E. A framework for topology. **(80b:06008)**
Strecker, George E. *See* **Adámek, Jiří; et al., (80f:18009)**
Wattel, E. Normally supercompact spaces and convexity preserving maps. **(80i:54028)**
Zidenberg-Spirydonow, H. *See* **Semadeni, Zbigniew, (80m:54016)**

18B35 Preorders, orders and lattices (viewed as categories) [See also 06–XX.]

Hoffmann, Rudolf-E. Continuous posets and adjoint sequences. **80h:18002**
Koldunov, A. V. Generators and cogenerators in categories of internally normal vector lattices. (Russian) **80i:18011**
Wand, Mitchell Fixed-point constructions in order-enriched categories. **80e:18002**

18B40 Groupoids, semigroupoids, semigroups, groups (viewed as categories) [See also 20Axx, 20Lxx, 20Mxx.]

Secondary classifications:

Trnková, V. Isomorphism of products and representation of commutative semigroups. **(80i:20054)**

18B99 None of the above, but in this section

Parodi, F. Construction of a universe of nonlinear devices over a pair of abelian groups. (Italian) **80k:18007**
Sette, A. M. (*with* Sette, J. S.) Functorialization of first-order language with finitely many predicates. **80h:18003**
Sette, J. S. *See* **Sette, A. M., 80h:18003**

Secondary classifications:

Brunet, Bernard Sur la classe des morphismes propres dans la catégorie des espaces de convergence. **(80g:54004)**
Ehrich, H.-D. Extensions and implementations of abstract data type specifications. **(80i:68013)**
Ho, S. M. F. (*with* Naimpally, S. A.) An abstract model for measure and category. **(80i:28003)**
Naimpally, S. A. *See* **Ho, S. M. F., (80i:28003)**
Salicrup López, Graciela (*with* Vázquez, R.) Connection and disconnection. **(80m:54015)**
Szabo, M. E. ★Algebra of proofs. **(80b:03097)**
Vázquez, R. *See* **Salicrup López, Graciela, (80m:54015)**
Whiteley, Walter Logic and invariant theory. IV. Invariants and syzygies in combinatorial geometry. **(80g:05023)**

18Cxx Categories and algebraic theories

Secondary classifications:

Calude, Cristian Categorical methods in computability. I. Recursive and nonprimitive recursive functions. (Romanian. English summary) **(80m:03110a)**
Categorical methods in computability. II. (Romanian. English summary) **(80m:03110b)**

18C05 Equational categories [See also 03–XX, 08C05.]

Secondary classifications:

Andréka, Hajnal (*with* Makai, E., Jr.; Márki, L.; Németi, István) Reduced products in categories. **(80h:03049)**
Hatcher, William S. (*with* Whitney, Stephen) ★Absolute algebra. **(80a:08001)**
Huq, Syed A. Discussion of the condition "monics are equalizers" implies "epis are surjectives" in categories. **(80b:18002)**
Makai, E., Jr. *See* **Andréka, Hajnal; et al., (80h:03049)**
Márki, L. *See* **Andréka, Hajnal; et al., (80h:03049)**
Németi, István *See* **Andréka, Hajnal; et al., (80h:03049)**
Whitney, Stephen *See* **Hatcher, William S., (80a:08001)**

18C10 Theories (e.g. algebraic theories), structure, and semantics [See also 03–XX.]

Căzănescu, Virgil Emil Catégories d'algèbres universelles. II. **80k:18008**
Day, Brian J. Duality in topological algebra. **80c:18005a**
Addendum: "Duality in topological algebra" (Bull. Austral. Math. Soc. **18** (1978), no. 3, 475–480). **80c:18005b**
Hatcher, William S. A language for type-free algebra. **80f:18005**
Lambek, J. (*with* Rattray, B. A.) A general Stone-Gel'fand duality. **80i:18012**
Obtułowicz, Adam (*with* Sokolnicki, Krzysztof) On the algebraic theory of Boolean algebras. (Russian summary) **80a:18002a**
Rattray, B. A. *See* **Lambek, J., 80i:18012**
Rosický, Jiří Categories of models of infinitary Horn theories. **80h:18004**
Sokolnicki, Krzysztof A characterization of the category of Boolean algebras via Lawvere's characterization of algebraic categories. (Russian summary) **80a:18002b**
See also **Obtułowicz, Adam, 80a:18002a**
Żembery, Ivan Admissible operations in categories of algebras. (Russian summary) **80f:18006**

Secondary classifications:

Barr, Michael The theory of theories as a model of syntax acquisition. **(80j:68071)**
Boardman, J. M. (*with* Vogt, R. M.) Tensor products of theories, application to infinite loop spaces. **(80f:55012)**
Cury, Florence ★Graphes multiplicatifs structurés. **(80k:18011)**
Day, Brian J. Varieties of an enriched category. **(80f:18008)**
Hatcher, William S. (*with* Whitney, Stephen) ★Absolute algebra. **(80a:08001)**
Marchini, Carlo Comparison of two categorical semantics. (Italian. English summary) **(80m:03113)**
Petrescu, Ioana Model-companions for logical functors. **(80a:03090)**
Vogt, R. M. *See* **Boardman, J. M., (80f:55012)**
Whitney, Stephen *See* **Hatcher, William S., (80a:08001)**

18C15 Triples (= standard construction, monad or triad), algebras for a triple, homology and derived functors for triples [See also 18Gxx.]

Bertrand, Richard *D*-algèbres et théorème de Beck généralisé. **80a:18003**
Bunge, Marta C. On the relationship between composite and tensor product triples. **80a:18004**
López López, M. A. (*with* Villanueva Nóvoa, E.) Product of triples. (Spanish) **80a:18005**
Martínez Cegarra, A. ★Homología y triples. (Spanish) [Homology and triples] **80a:18006**
Villanueva Nóvoa, E. *See* **López López, M. A., 80a:18005**
Wolff, Harvey Free monads and the orthogonal subcategory problem. **80b:18007**
Wood, R. J. Coalgebras for closed comonads. **80d:18008**

Secondary classifications:

Day, Brian J. Varieties of an enriched category. **(80f:18008)**
Herrlich, Horst (*with* Strecker, George E.) Algebra ∪ topology. **(80j:18013)**
Linton, F. E. J. (*with* Paré, Robert) Injectives in topoi. I. Representing coalgebras as algebras. **(80j:18007a)**
Paré, Robert *See* **Linton, F. E. J., (80j:18007a)**
Strecker, George E. *See* **Herrlich, Horst, (80j:18013)**

18C20 Algebras and Kleisli categories associated with monads

Lambek, J. (*with* Rattray, B. A.) Functional completeness and Stone duality. **80c:18006**
Rattray, B. A. *See* **Lambek, J., 80c:18006**

Secondary classifications:

Bertrand, Richard *D*-algèbres et théorème de Beck généralisé. **(80a:18003)**

18C99 None of the above, but in this section

Burmeister, P. (*with* John, R.; Pasztor, A.) On closed morphisms in the category of partial algebras. **80k:18009**
Căzănescu, Virgil Emil Catégories d'algèbres universelles. I. **80g:18006**
John, R. *See* **Burmeister, P.; et al., 80k:18009**
Keigher, William F. Symmetric monoidal comonads and differential algebra. **80c:18007**
Pasztor, A. *See* **Burmeister, P.; et al., 80k:18009**
Rodríguez Fernández, C. General theory of varieties. (Spanish) **80b:18008**

Secondary classifications:

Hong, Sung Sa (*with* Nel, Louis D.) Duality theorems for algebras in convenient categories. **(80g:18007)**
Koubek, Václav (*with* Reiterman, Jan) Categorical constructions of free algebras, colimits, and completions of partial algebras. **(80g:18003)**
Loullis, George Sheaves and Boolean valued model theory. **(80k:03037)**
Nel, Louis D. *See* **Hong, Sung Sa, (80g:18007)**
Reiterman, Jan *See* **Koubek, Václav, (80g:18003)**

18Dxx Categories with structure

18D05 Double categories, 2-categories, bicategories, hypercategories

Ehresmann, Andrée (*with* Ehresmann, Charles) Multiple functors. II. The monoidal closed category of multiple categories. **80k:18010a**
(*with* Ehresmann, Charles) Multiple functors. III. The Cartesian closed category Cat_α. **80k:18010b**
Ehresmann, Charles *See* **Ehresmann, Andrée, 80k:18010a** *and* **Ehresmann, Andrée, 80k:18010b**

Secondary classifications:

Wood, R. J. $\underline{V}$-indexed categories. **(80j:18012)**

18D10 Monoidal categories (= multiplicative categories)

Keigher, William F. Symmetric monoidal closed categories generated by commutative adjoint monads. **80i:18013**
Ligon, Thomas S. La théorie de Galois dans les catégories monoïdales. (English summary) **80d:18009**
Lindner, Harald Adjunctions in monoidal categories. **80i:18014**
Pedicchio, Maria Cristina (*with* Rossi, Fabio) V-monoidality, V-adjunctions and monoidal functors. I, II. (Italian. English summary) **80i:18015**
Rossi, Fabio *See* **Pedicchio, Maria Cristina, 80i:18015**

Secondary classifications:

Kacov, E. B. The tensor product of functors. (Russian) **(80d:18002)**

18D15 Closed categories (closed monoidal and Cartesian closed categories, etc.)

Barr, Michael Building closed categories. **80f:18007**
Day, Brian J. (*with* Laplaza, M. L.) On embedding closed categories. **80e:18003**
An extension of Pontryagin duality. **80j:18011**
Varieties of an enriched category. **80f:18008**
Hong, Sung Sa (*with* Nel, Louis D.) Duality theorems for algebras in convenient categories. **80g:18007**
Laplaza, M. L. *See* **Day, Brian J., 80e:18003**
Nel, Louis D. *See* **Hong, Sung Sa, 80g:18007**

Secondary classifications:

Ehresmann, Andrée (*with* Ehresmann, Charles) Multiple functors. II. The monoidal closed category of multiple categories. **(80k:18010a)**
(*with* Ehresmann, Charles) Multiple functors. III. The Cartesian closed category Cat_α. **(80k:18010b)**
Ehresmann, Charles *See* **Ehresmann, Andrée, (80k:18010a)** *and* **Ehresmann, Andrée, (80k:18010b)**
Hasuo, Yutaka On a Cartesian closed category. **(80c:54022)**
Marny, Thomas On epireflective subcategories of topological categories. **(80g:18004)**
Seip, Ulrich A convenient setting for differential calculus. **(80b:58013)**
Wätjen, Dietmar Categorical theory of the simulation of automata and of their transition monoids. (German, Russian and French summaries) **(80a:68063)**

18D20 Enriched categories (over closed or monoidal categories)

Day, Brian J. On Pontryagin duality. **80g:18008**
Di Sieno, Simonetta (*with* Galuzzi, Massimo) Categories based on a Heyting algebra. (Italian. English summary) **80h:18005**
Galuzzi, Massimo *See* **Di Sieno, Simonetta, 80h:18005**
Wood, R. J. $\underline{V}$-indexed categories. **80j:18012**

Secondary classifications:

Day, Brian J. Varieties of an enriched category. **(80f:18008)**
Pedicchio, Maria Cristina (*with* Rossi, Fabio) V-monoidality, V-adjunctions and monoidal functors. I, II. (Italian. English summary) **(80i:18015)**
Rossi, Fabio *See* **Pedicchio, Maria Cristina, (80i:18015)**

18D25 Strong functors, strong adjunctions

Secondary classifications:

Pedicchio, Maria Cristina (*with* Rossi, Fabio) V-monoidality, V-adjunctions and monoidal functors. I, II. (Italian. English summary) **(80i:18015)**
Rossi, Fabio *See* **Pedicchio, Maria Cristina, (80i:18015)**

18D30 Fibered categories

Adámek, Jiří (*with* Herrlich, Horst; Strecker, George E.) Least and largest initial completions. I, II. **80f:18009**
Herrlich, Horst (*with* Strecker, George E.) Algebra ∪ topology. **80j:18013**
See also **Adámek, Jiří; et al., 80f:18009**
Strecker, George E. *See* **Adámek, Jiří; et al., 80f:18009** *and* **Herrlich, Horst, 80j:18013**

Secondary classifications:

Gonshor, Harry Enlargements of Boolean algebras and Stone space. **(80g:06017)**
Harvey, J. Martin Topological functors from factorization. **(80j:18004)**

18D35 Structured objects in a category (group objects, etc.)

Petermann, Elke On a method of constructing categories. **80h:18006**
Tan, S. K. Group objects in a category with finite products. **80d:18010**

Secondary classifications:

Stout, Lawrence Neff Quels sont les espaces topologiques dans les topos? **(80d:18007)**

18D99 None of the above, but in this section

Adámek, Jiří (*with* Sturm, Teo) On congruence lattices in a category. (Russian summary) **80j:18014**
Crawley, Winston Epimorphisms and $\mathfrak{K}$-coextensions. **80g:18009**
Cury, Florence ★Graphes multiplicatifs structurés. **80k:18011**
Grandis, Marco Quasi-inverse involution semigroups and categories. Orthodox categories. IV. (Italian summary) **80c:18008b**
Induction in orthodox involution categories. Orthodox categories. III. (Italian summary) **80c:18008a**
Herrlich, Horst Initial and final completions. **80j:18015**
Sturm, Teo *See* **Adámek, Jiří, 80j:18014**
Tholen, Walter Semitopological functors. I. **80k:18012a**
(*with* Wischnewsky, Manfred B.) Semitopological functors. II. External characterizations. **80k:18012b**
Titov, N. P. Graph-scheme of the coherence problem. (Russian) **80g:18010**
Wischnewsky, Manfred B. Structure functors—representation and existence theorems. **80m:18003**
See also **Tholen, Walter, 80k:18012b**

Secondary classifications:

Cerruti, Umberto Non-Archimedean valued modules and non-Cantorian set theory. **(80c:04006)**
Fried, Ervin (*with* Wiegandt, Richard) Abstract relational structures and their torsion theory. **(80e:18006)**
Wiegandt, Richard *See* **Fried, Ervin, (80e:18006)**

18Exx Abelian categories

18E05 Preadditive, additive categories

Grigorjan, A. G. Normal radicals of preadditive precategories. (Russian. English summary) **80a:18007**

Secondary classifications:

Horadam, K. J. The mapping cylinder resolution for a groupnet diagram. **(80m:20041)**

18E10 Exact categories, abelian categories

Beyl, F. Rudolf The connecting morphism in the Kernel-Cokernel sequence. **80k:18013**
Grandis, Marco Exact categories and distributive lattices. Orthodox symmetrizations. II. **80g:18011a**
Exact categories and orthodox symmetrizations. Orthodox symmetrizations. III. (Italian summary) **80g:18011b**
Lambek, J. (*with* Rattray, B. A.) Additive duality at cosmall injectives. **80j:18016**
Rattray, B. A. *See* **Lambek, J., 80j:18016**
Yamagata, Kunio Indecomposable injective functors from an abelian category to the category of abelian groups. **80j:18017**
Yutani, Hiroshi Coequalizer in the category of BCK-algebras. II. **80k:18014**

Secondary classifications:

Otal Cinca, Javier Functorial characterization of categorical duality of R- and N-closed classes. (Spanish. English summary) **(80g:18002)**

18E15 Grothendieck categories

Albu, Toma Une remarque sur les catégories de Grothendieck commutatives. **80k:18007**
Leszczyński, Zbigniew Remarks on functor categories. **80e:18004**
(*with* Simson, Daniel) On pure semisimple Grothendieck categories and the exchange property. (Russian summary) **80i:18016**
Simson, Daniel On pure semi-simple Grothendieck categories. I. **80a:18008**
Categories of representations of species. **80k:18008**
See also **Leszczyński, Zbigniew, 80i:18016**

Secondary classifications:

Năstăsescu, Constantin Conditions de finitude pour les modules. **(80i:16032)**

18E20 Imbedding theorems [See also 18B15.]

18E25 Derived functors and satellites

18E30 Derived categories, triangulated categories

Secondary classifications:

Beĭlinson, A. A. Coherent sheaves on $\mathbf{P}^n$ and problems in linear algebra. (Russian) **(80c:14010b)**

18E35 Localization of categories

Ohtake, Koichiro *See* **Tachikawa, Hiroyuki, 80e:18005**
Tachikawa, Hiroyuki (*with* Ohtake, Koichiro) Colocalization and localization in abelian categories. **80e:18005**

Secondary classifications:

Albu, Toma Une remarque sur les catégories de Grothendieck commutatives. **(80h:18007)**
Nanda, Sribatsa Adams completion and Postnikov systems. **(80h:55020)**
van Oystaeyen, F. (*with* Verschoren, A.) ★Reflectors and localization. **(80f:18012)**
Verschoren, A. *See* **van Oystaeyen, F., (80f:18012)**

18E40 Torsion theories, radicals [See also 13D30, 16A63.]

Fried, Ervin (*with* Wiegandt, Richard) Abstract relational structures and their torsion theory. **80e:18006**
Holcombe, Michael (*with* Walker, Roland) Radicals in categories. **80b:18009**
Prest, Mike Some model-theoretic aspects of torsion theories. **80a:18009**
Terlikowska-Osłowska, Barbara Radical and semisimple classes of objects in categories with a self-dual set of axioms. (Russian summary) **80a:18010**
Wakamatsu, Takayoshi Pseudo-projectives and pseudo-injectives in abelian categories. **80i:18017**
Walker, Roland *See* **Holcombe, Michael, 80b:18009**
Wiegandt, Richard *See* **Fried, Ervin, 80e:18006**

Secondary classifications:

Golan, Jonathan S. Rings having a composition series with respect to a torsion theory. **(80h:16027)**
Gómez Pardo, J. L. Functional nilpotence. (Spanish) **(80a:18001)**
Ivanov, A. M. Radicals in the category of all abelian groups without torsion. (Russian) **(80i:20028)**
Kato, Toyonori Duality between colocalization and localization. **(80i:16005)**
Leavitt, W. G. (*with* Wiegandt, Richard) Torsion theory for not necessarily associative rings. **(80d:17005)**
Müller, Bruno J. Twosided quotient rings for Noetherian pi-rings. **(80b:16005)**
van Oystaeyen, F. Ring theory ∩ torsion theory = useful localization. **(80a:16007)**
Prest, Mike Torsion and universal Horn classes of modules. **(80i:16037)**
Smith, Patrick F. On the structure of certain *PP*-rings. **(80j:16020)**
Wiegandt, Richard *See* **Leavitt, W. G., (80d:17005)**

18E99 None of the above, but in this section

Takeuchi, Mitsuhiro Faithfully flat descent of abelian categories. **80f:18010**

Secondary classifications:

Almkvist, Gert *K*-theory of endomorphisms. **(80i:18018)**
Ishibashi, Makoto A formulation of cancellation theory and its application to modules. **(80b:16023)**
Prószyński, Andrzej Some functors related to polynomial theory. II. **(80j:13012)**
Sato, Masahisa On equivalences between module subcategories. **(80k:16053)**
Yamagata, Kunio On Morita duality for additive group valued functors. **(80d:16029)**

18Fxx Categories and geometry

18F05 Local categories and functors

18F10 Grothendieck topologies [See also 14F20.]

Secondary classifications:

Mihalinec, M. Endomorphisms of sheaves of constructive functions. (Russian. English summary) **(80j:03092)**

18F15 Abstract manifolds and fiber bundles [See also 55Rxx, 57Pxx.]

Reyes, G. E. (*with* Wraith, G. C.) A note on tangent bundles in a category with a ring object. **80f:18011**
Wraith, G. C. *See* **Reyes, G. E., 80f:18011**

Secondary classifications:

Bernštein, I. N. (*with* Gel'fand, I. M.; Gel'fand, S. I.) Algebraic vector bundles on $\mathbf{P}^n$ and problems of linear algebra. (Russian) **(80c:14010a)**
Fedotov, V. P. Structures generated by invariants. (Russian. English summary) **(80f:58007)**
Gel'fand, I. M. *See* **Bernštein, I. N.; et al., (80c:14010a)**
Gel'fand, S. I. *See* **Bernštein, I. N.; et al., (80c:14010a)**

18F20 Presheaves and sheaves [See also 14F05, 32C35, 32L10, 54B40, 55N30.]

Banaschewski, B. Recovering a space from its Banach sheaves. **80m:18004**
Mulvey, Christopher J. Banach spaces over a compact space. **80m:18005**
van Oystaeyen, F. (*with* Verschoren, A.) ★Reflectors and localization. **80f:18012**
Pechanec-Drahoš, Jaroslav Functional separation of inductive limits and representation of presheaves by sections. I. Separation theorems for inductive limits of closured presheaves. **80a:18011**
Verschoren, A. *See* **van Oystaeyen, F., 80f:18012**

Secondary classifications:

Cartier, Pierre Logique, catégories et faisceaux [d'après F. Lawvere et M. Tierney]. **(80m:03111)**
(Lawvere, F.) *See* **Cartier, Pierre, (80m:03111)**
Malgoire, Jean (*with* Voisin, Christine) Spectre d'un espace annelé et dualité de Stone généralisée. (English summary) **(80j:55026)**
Mulvey, Christopher J. A generalisation of Gel'fand duality. **(80d:16028)**
Riccioli, Barbara Veit Forcing as a logical principle for the construction of sheaves. I. (Italian. French summary) **(80b:03109a)**
Forcing as a logical principle for the construction of sheaves. II. (Italian) **(80b:03109b)**
Stout, Lawrence Neff Quels sont les espaces topologiques dans les topos? **(80d:18007)**
(Tierney, M.) *See* **Cartier, Pierre, (80m:03111)**
Vagner, V. V. Introrestrictive factored ordered sets and projective systems of sets. (Russian) **(80d:06005)**
Voisin, Christine *See* **Malgoire, Jean, (80j:55026)**
Volger, Hugo Preservation theorems for limits of structures and global sections of sheaves of structures. **(80d:03029)**

18F25 Algebraic *K*-theory and *L*-theory [See also 10Cxx, 12–XX, 13D15, 14Cxx, 16A54, 57R65, 57R67.]

Almkvist, Gert *K*-theory of endomorphisms. **80i:18018**
Arnold, James E., Jr. A generalized Cartan isomorphism for the Grothendieck group of a finite group. **80a:18012**
Bak, Anthony The computation of even dimension surgery groups of odd torsion groups. **80b:18010**
Browder, William Algebraic *K*-theory with coefficients Z/p. **80b:18011**
Carlsson, G. (*with* Milgram, R. James) Torsion Witt rings for orders and finite groups. **80b:18012**
Dayton, Barry H. *K*-theory of tetrahedra. **80e:18007**
Dennis, R. Keith (*with* Krusemeyer, Mark I.) $K_2(A[X, Y]/XY)$, a problem of Swan, and related computations. **80j:18018**
(van der Kallen, Wilberd) *See* **Vorst, Ton, 80k:18016**
Keune, Frans The relativization of K_2. **80a:18013**
Krusemeyer, Mark I. *See* **Dennis, R. Keith, 80j:18018**
Loday, Jean-Louis Cohomologie et groupe de Steinberg relatifs. **80b:18013**
Magurn, Bruce A. Images of SK_1ZG. **80m:18006**
Milgram, R. James *See* **Carlsson, G., 80b:18012**
Niwa, Masahiko Notes on *K*-theory of linear categories. II. **80f:18013**
Oliver, Robert Subgroups generating $D(\mathbf{Z}G)$. **80d:18011**
Pirašvili, T. I. Algebraic Karoubi-Villamayor and Bass functors for ringoids. (Russian. Georgian and English summaries) **80k:18015**
Ranicki, Andrew On the algebraic *L*-theory of semisimple rings. **80a:18014**
Rehmann, Ulf Zentrale Erweiterungen der speziellen linearen Gruppe eines Schiefkörpers. **80h:18009**
Sherman, Clayton C. A note on the localization theorem for projective modules. **80h:18010**
Strooker, Jan R. Karoubi-Villamayor *K*-theory is not homotopy Quillen theory. **80b:18014**
Thomason, Robert W. Homotopy colimits in the category of small categories. **80c:18015**
Tulenbaev, M. S. The Schur multiplier of the group of elementary matrices of finite order. (Russian) **80j:18019**
Vorst, Ton Localization of the *K*-theory of polynomial extensions. **80k:18016**
Weibel, Charles A. The homotopy exact sequence in algebraic *K*-theory. **80i:18019**

Secondary classifications:

Alexander, John P. (*with* Conner, P. E.; Hamrick, Gary C.) Metabolic and hyperbolic forms. **(80e:57038)**
Alperin, Roger (*with* Wright, David Lee) $K_2(2, k[T, T^{-1}])$ is generated by "symbols". **(80k:13006)**
Bak, Anthony Arf's theorem for trace Noetherian and other rings. **(80j:10030)**
Baladze, D. O. The duality law for homology and cohomology *K*-groups. (Russian. English summary) **(80h:55019)**
Carlsson, G. (*with* Milgram, R. James) The structure of odd *L*-groups. **(80m:57025)**
Charney, Ruth M. Homology stability of GL_n of a Dedekind domain. **(80f:13007)**
Cohen, Joel M. Finite group actions on finite complexes. **(80d:57022)**
Conner, P. E. *See* **Alexander, John P.; et al., (80e:57038)**
Ehrlich, Karel Fibrations and a transfer map in algebraic *K*-theory. **(80g:55031)**
Geller, Susan C. (*with* Roberts, Leslie G.) Excision and K_1 regularity for curves with normal crossings. **(80k:14028)**
Grayson, Daniel R. K_2 and the *K*-theory of automorphisms. **(80g:16029)**
Hambleton, Ian (*with* Milgram, R. James) The surgery group $L_3^h(\mathbf{Z}(G))$ for G a finite 2-group. **(80m:57026)**
Hamrick, Gary C. *See* **Alexander, John P.; et al., (80e:57038)**
Hausmann, Jean-Claude (*with* Husemoller, Dale) Acyclic maps. **(80k:55044)**
Husemoller, Dale *See* **Hausmann, Jean-Claude, (80k:55044)**
May, J. P. A_∞ ring spaces and algebraic *K*-theory. **(80k:55015)**
Milgram, R. James *See* **Carlsson, G., (80m:57025)** *and* **Hambleton, Ian, (80m:57026)**
Miščenko, A. S. (*with* Solov'ev, Ju. P.) A classifying space for Hermitian *K*-theory. (Russian) **(80g:57051)**
Roberts, Leslie G. *See* **Geller, Susan C., (80k:14028)**
Sherman, Clayton C. *K*-cohomology of regular schemes. **(80h:14004)**
Snaith, Victor P. Algebraic cobordism and *K*-theory. **(80k:57060)**
Solov'ev, Ju. P. *See* **Miščenko, A. S., (80g:57051)**
Staffeldt, R. E. Reduction theory and K_3 of the Gaussian integers. **(80m:22014)**
Wagoner, J. B. Diffeomorphisms, K_2, and analytic torsion. **(80e:57036)**
Wright, David Lee *See* **Alperin, Roger, (80k:13006)**

18F30 Grothendieck groups [See also 13D15, 16A54.]

Secondary classifications:

Almkvist, Gert *K*-theory of endomorphisms. **(80k:18018)**

18F99 None of the above, but in this section

Secondary classifications:

Frei, Armin (*with* Kleisli, Heinrich) Shape invariant functors: application in module-theory. **(80a:16041)**
Kleisli, Heinrich *See* **Frei, Armin, (80a:16041)**

18Gxx Homological algebra [See also 55Uxx.]

(Čogošvili, G. S.) *See* **Collection: Algebra, 80k:18017**
Algebra *See* **Collection: Algebra, 80k:18017**
Collection:
Algebra ★Сборник работ по алгебре. 2. (Russian) [Collection of articles on algebra. 2] **80k:18017**
Homological algebra *See* **Collection: Algebra, 80k:18017**
Lie groups *See* **Collection: Algebra, 80k:18017**

Secondary classifications:

Rotman, Joseph J. ★An introduction to homological algebra. **(80k:18001)**

18G05 Projectives and injectives [See also 13C10, 13C11, 16A50, 16A52.]

Secondary classifications:

Yamagata, Kunio Indecomposable injective functors from an abelian category to the category of abelian groups. **(80j:18017)**

18G10 Resolutions; derived functors [See also 18E25.]

Hmeleva, L. E. (*with* Jakovlev, A. V.) The existence of a periodic resolution for a complemented algebra. (Russian) **80f:18014**
Jakovlev, A. V. *See* **Hmeleva, L. E., 80f:18014**
Maharadze, L. M. The homotopy of pseudosimplicial rings and non-abelian derived functors. (Russian. English summary) **80b:18016**
Schochet, Claude Acyclic ideals and Koszul complexes. **80m:18007**

Secondary classifications:

Matlis, Eben The higher properties of *R*-sequences. **(80a:13013)**
Sjerve, Denis Generalized homological reduction theorems. **(80j:55021)**

18G15 Ext and Tor, generalizations, Künneth formula [See also 55U25.]

Vale Gonsalves, M. J. Cohomology of Lie groups and Lie algebras. (Spanish) **80h:18011**

Secondary classifications:

Bödigheimer, Carl-Friedrich Splitting the Künneth sequence in *K*-theory. **(80k:55013)**
Dula, G. (*with* Katz, E.) Computation of the homology of $\Omega(X \vee Y)$. **(80m:55026)**
Holt, D. F. An interpretation of the cohomology groups $H^n(G, M)$. **(80m:20040)**
Katz, E. *See* **Dula, G., (80m:55026)**
Ratcliffe, John G. Crossed extensions. **(80m:20042)**

18G20 Homological dimension [See also 13Dxx, 16A60, 16A62.]

Brune, Hermann Flache Darstellungen von geordneten Mengen. (English summary) **80i:18020**
Some left pure semisimple ringoids which are not right pure semisimple. **80k:18018**

Secondary classifications:

Gildenhuys, Dion Classification of soluble groups of cohomological dimension two. **(80e:20062)**

18G25 Relative homological algebra, projective classes

Secondary classifications:

Chapman, G. R. Relative cohomology groups of low dimension. **(80h:20070)**

18G30 Simplicial sets, simplicial objects (in a category) [See also 55U10.]

Secondary classifications:

Latch, Dana May (*with* Thomason, Robert W.; Wilson, W. Stephen) Simplicial sets from categories. **(80e:55012)**
Smirnov, V. A. Twisted Cartesian products. (Russian) **(80e:55039)**
Thomason, Robert W. *See* **Latch, Dana May; et al., (80e:55012)**
Wilson, W. Stephen *See* **Latch, Dana May; et al., (80e:55012)**

18G35 Chain complexes [See also 18E30, 55U15.]

Secondary classifications:

Cohen, Joel M. Finite group actions on finite complexes. **(80d:57022)**

18G40 Spectral sequences, hypercohomology [See also 55Txx.]

Carlsson, Gunnar An Adams-type spectral sequence for change of rings. **80c:18009**
Ta Man A generalization of spectral sequences. (Romanian. French summary) **80g:18012**

Secondary classifications:

Buchsbaum, David A. Generic free resolutions. II. **(80e:13007)**
Roque, Jean-Louis Annulation de l'homologie et de la cohomologie des anneaux augmentés. (English summary) **80f:16033)**

18G50 Nonabelian homological algebra

18G55 Nonabelian homotopical algebra

Evrard, Marcel Homotopie des foncteurs en groupes. **80h:18012**
Fritsch, Rudolf (*with* Latch, Dana May) Homotopy inverses for nerve. **80e:18010**
Latch, Dana May *See* **Fritsch, Rudolf, 80e:18010**

Secondary classifications:

Chen, Kuo Tsai Circular bar construction. **(80j:57045)**

18G99 None of the above, but in this section

Secondary classifications:

Bănică, Constantin Sur le complexe cotangent de Lichtenbaum et Schlessinger. (English summary) **(80d:32023)**
Mackenzie, K. A. Rigid cohomology of topological groupoids. **(80i:22011)**
Peterson, Brian Extensions of pro-affine algebraic groups. **(80e:14020)**
Tarazona Ferrer, D. ★Homología respecto a una variedad de álgebras de Lie. (Spanish) [Homology with respect to a variety of Lie algebras] **(80e:17013)**

20–XX GROUP THEORY AND GENERALIZATIONS

20–01 Elementary exposition, textbooks

Błaszczyk, Bronisława (*with* Kula, Mieczysław; Sładek, Andrzej; Szczepanik, Bonifacy; Szczepanik, Lucyna; Szymiczek, Kazimierz) ★Zbiór zadań z teorii grup. (Polish) [A collection of problems on group theory] **80k:20001**
Bouvier, Alain (*with* Richard, Denis) ★Groupes. **80g:20001**
(Burns, Robert G.) *See* **Kargapolov, M. I.; et al., 80k:20002**
Grossman, Michael A short proof that **R** and **C** are group-isomorphic. **80h:20001**
Kargapolov, M. I. (*with* Merzljakov, Ju. I.) ★Fundamentals of the theory of groups. **80k:20002**
Kula, Mieczysław *See* **Błaszczyk, Bronisława; et al., 80k:20001**
Masat, Francis E. A useful characterization of a normal subgroup. **80c:20001**
Merzljakov, Ju. I. *See* **Kargapolov, M. I., 80k:20002**
Richard, Denis *See* **Bouvier, Alain, 80g:20001**
Serre, Jean-Pierre ★Représentations linéaires des groupes finis. **80f:20001**
Sładek, Andrzej *See* **Błaszczyk, Bronisława; et al., 80k:20001**
Szczepanik, Bonifacy *See* **Błaszczyk, Bronisława; et al., 80k:20001**
Szczepanik, Lucyna *See* **Błaszczyk, Bronisława; et al., 80k:20001**
Szymiczek, Kazimierz *See* **Błaszczyk, Bronisława; et al., 80k:20001**

Secondary classifications:

Fischer, Gerd (*with* Sacher, Reinhard) ★Einführung in die Algebra. **(80c:00002)**
Lamprecht, Erich ★Einführung in die Algebra. **(80e:00001)**
Oniščik, A. L. ★Элементы линейной алгебры и теории групп. (Russian) [Elements of linear algebra and group theory] **(80i:15002)**
Sacher, Reinhard *See* **Fischer, Gerd, (80c:00002)**

20–02 Advanced exposition (research surveys, monographs, etc.)

Gorčakov, Ju. M. ★Группы с конечными классами сопряженных элементов. (Russian) [Groups with finite classes of conjugate elements] **80b:20001**
Neumann, B. H. Some new rumours in group theory. **80e:20001**
Wales, David B. Connections between finite linear groups and linear algebra. **80g:20002**

Secondary classifications:

Brauer, Richard Dagobert Blocks of characters and structure of finite groups. **(80f:20013)**
Cameron, Peter J. A combinatorial tool kit for permutation groups. **(80d:05001)**
James, G. D. ★The representation theory of the symmetric groups. **(80g:20019)**

20–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

(Brauer, Richard Dagobert) *See* **Green, J. A., (80g:01024)** *and* **Feit, Walter, (80m:01033)**
Feit, Walter Richard D. Brauer. **(80m:01033)**
Green, J. A. Richard Dagobert Brauer. **(80g:01024)**
Hawkins, Thomas The creation of the theory of group characters. **(80d:01014)**
Konjuh, V. C. *See* **Zalesskiĭ, A. E., (80i:01014)**
Mills, Stella Note historique sur les groupes transitifs de permutations des degrés six et sept. (English summary) **(80g:01014)**

Silvestri, Richard Simple groups of finite order in the nineteenth century. **(80k:01039)**
Stolze, Charles H. A history of the divergence theorem. (French summary) **(80j:01023)**
Zalesskiĭ, A. E. (*with* Konjuh, V. C.) ★Алгебра и алгебраическая геометрия в работах математиков Белоруссии. (Russian) [Algebra and algebraic geometry in the works of the mathematicians of Belorussia] **(80i:01014)**
Bibliography:
Brauer, Richard D. *See* **Feit, Walter, (80m:01033)**
Brauer, Richard Dagobert *See* **Green, J. A., (80g:01024)**
Obituary:
Brauer, Richard D. *See* **Feit, Walter, (80m:01033)**
Brauer, Richard Dagobert *See* **Green, J. A., (80g:01024)**

20–04 Explicit machine computation and programs (not the theory of computation or programming)

Vasil'ev, Ju. P. An algorithm for the computer construction of automorphisms and the solution of the question of the isomorphism of finite groups. (Russian. English summary) **80c:20002**

20–06 Proceedings, conferences, etc.

(Polák, G.) *See* **Algebraic theory of semigroups, 80d:20001**
(Wall, C. T. C.) *See* **Homological group theory, 80m:20001**
Aarhus *See* **Proceedings: Symposium on Modular Representations of Finite Groups, 80d:20002**
Algebraic theory of semigroups ★Algebraic theory of semigroups. **80d:20001**
Colloquia Mathematica Societatis János Bolyai *See* **Algebraic theory of semigroups, 80d:20001**
Conference:
Algebraic Theory of Semigroups *See* **Algebraic theory of semigroups, 80d:20001**
Durham *See* **Homological group theory, 80m:20001**
Finite groups *See* **Proceedings: Symposium on Modular Representations of Finite Groups, 80d:20002** *and* **Theory of finite groups, 80g:20003**
Group theory *See* **Homological group theory, 80m:20001**
Homological group theory ★Homological group theory. **80m:20001**
Kyoto *See* **Theory of finite groups, 80g:20003**
Proceedings:
Symposium on Modular Representations of Finite Groups ★Proceedings of the Symposium on Modular Representations of Finite Groups. **80d:20002**
Semigroups *See* **Algebraic theory of semigroups, 80d:20001**
Symposium:
Homological and Combinatorial Techniques in Group Theory *See* **Homological group theory, 80m:20001**
Modular Representations of Finite Groups *See* **Proceedings: Symposium on Modular Representations of Finite Groups, 80d:20002**
Theory of Finite Groups *See* **Theory of finite groups, 80g:20003**
Szeged *See* **Algebraic theory of semigroups, 80d:20001**
Theory of finite groups ★Theory of finite groups. (Japanese) **80g:20003**

Secondary classifications:

(Valucè, I. I.) *See* **Quasigroups and loops, (80e:20087)**
Algebra *See* **American Mathematical Society Translations, Ser. 2, (80m:00006)**
American Mathematical Society Translations, Ser. 2 ★Twelve papers in logic and algebra. **(80m:00006)**
Kyoto *See* **Seminar: Permutation Groups and Related Topics, (80e:20002)**
Logic *See* **American Mathematical Society Translations, Ser. 2, (80m:00006)**
Permutation groups *See* **Seminar: Permutation Groups and Related Topics, (80e:20002)**
Proceedings:
Symposium on Semigroups ★Proceedings of the 2nd Symposium on Semigroups. **(80e:20069)**
Quasigroups and loops ★Квазигруппы и лупы. (Russian) [Quasigroups and loops] **(80e:20087)**
Semigroups *See* **Proceedings: Symposium on Semigroups, (80e:20069)**
Seminar:
Permutation Groups and Related Topics ★Seminar on Permutation Groups and Related Topics. (Japanese) **(80e:20002)**
Symposium:
Semigroups *See* **Proceedings: Symposium on Semigroups, (80e:20069)**
Tokyo *See* **Proceedings: Symposium on Semigroups, (80e:20069)**

20Axx Foundations

20A05 Axiomatics and elementary properties

Neumann, B. H. On a problem of Ian D. Macdonald. **80f:20002**

20A10 Metamathematical considerations {For word problems, see 20F10.}

Secondary classifications:

Zamjatin, A. P. A nonabelian variety of groups has an undecidable elementary theory. (Russian) **(80c:03045)**

20A15 Applications of logic to group theory

Secondary classifications:

Baudisch, Andreas A note on the elementary theory of torsion free abelian groups with one predicate for subgroups. (German, Russian and French summaries) **(80d:03012)**
Eklof, Paul C. Classes closed under substructures and direct limits. **(80m:03068)**
Mekler, Alan H. On residual properties. **(80j:03044)**
Paljutin, E. A. Indecomposable ω_1-free abelian groups. (Russian) **(80d:20046)**
Rothmaler, Philipp ★Total transzendente abelsche Gruppen und Morley-Rang. **(80c:03035)**
Saracino, Dan (*with* Wood, Carol) Periodic existentially closed nilpotent groups. **(80m:03071)**
Shelah, Saharon Existentially-closed groups in $\aleph_1$ with special properties. **(80j:03047)**
(*with* Ziegler, Martin) Algebraically closed groups of large cardinality. **(80j:03048)**
Tokarenko, A. I. The group-theoretic properties N_0, N and $\bar{N}$ are not axiomatizable. (Russian) **(80i:03047)**
Wood, Carol *See* **Saracino, Dan, (80m:03071)**
Ziegler, Martin *See* **Shelah, Saharon, (80j:03048)**

20A99 None of the above, but in this section

20Bxx Permutation groups

Kyoto *See* **Seminar: Permutation Groups and Related Topics, 80e:20002**
Permutation groups *See* **Seminar: Permutation Groups and Related Topics, 80e:20002**
Seminar:
Permutation Groups and Related Topics ★Seminar on Permutation Groups and Related Topics. (Japanese) **80e:20002**

20B05 General theory for finite groups

Blass, Andreas Natural endomorphisms of Burnside rings. **80h:20002**
Burn, R. P. Cayley tables and associativity. **80a:20001**
Craig, William Lane A presentation of the symmetric group based on unique irredundant nondecreasing factorization. **80a:20002**
Finkelstein, Harold (*with* Mandelberg, K. I.) On solutions of "equations in symmetric groups". **80a:20003**
Goldschmidt, David M. (*with* Scott, Leonard L.) A problem of W. A. Manning on primitive permutation groups. **80a:20004**
Herzog, Marcel (*with* Praeger, Cheryl E.) Corrigendum: "On the fixed points of Sylow subgroups of transitive permutation groups" [J. Austral. Math. Soc. Ser. A **21** (1976), no. 4, 428–437; MR 53 #13364]. **80h:20003**
Kowol, G. A class of polynomial permutations on groups. **80i:20001**
Mandelberg, K. I. *See* **Finkelstein, Harold, 80a:20003**
Praeger, Cheryl E. *See* **Herzog, Marcel, 80h:20003**
Scott, Leonard L. *See* **Goldschmidt, David M., 80a:20004**
Tretkoff, Carol (*with* Tretkoff, Marvin) On a theorem of Rimhak Ree about permutations. **80g:20004**
Tretkoff, Marvin *See* **Tretkoff, Carol, 80g:20004**

Secondary classifications:

Klemm, Michael (*with* Wagner, Bernd) A matrix of combinatorial numbers related to the symmetric groups. **(80k:05005)**
Ponizovskiĭ, I. S. On the radical of the Burnside algebra of a finite inverse semigroup. **(80i:20053)**
Wagner, Bernd *See* **Klemm, Michael, (80k:05005)**

20B07 General theory for infinite groups

20B10 Characterization theorems

Cameron, Peter J. (*with* Neumann, Peter M.; Saxl, Jan) An interchange property in finite permutation groups. **80g:20005**
Camina, Alan R. (*with* McDermott, J. P. J.) On $\frac{1}{2}$-transitive Frobenius regular groups. **80j:20001**
James, G. D. A note on the decomposition matrices of $\mathfrak{S}_{12}$ and $\mathfrak{S}_{13}$ for the prime 3. **80a:20005**
Knapp, Wolfgang On primitive permutation groups which induce a Frobenius group on a suborbit. **80c:20003**
Levingston, Richard Primitive permutation groups containing a cycle of prime power length. **80a:20006**
Liebeck, Martin W. Transitive permutation groups of some special prime degrees. **80g:20006**
McDermott, J. P. J. *See* **Camina, Alan R., 80j:20001**
Neumann, Peter M. *See* **Cameron, Peter J.; et al., 80g:20005**
Praeger, Cheryl E. On doubly transitive permutation groups. **80a:20007**
Saxl, Jan *See* **Cameron, Peter J.; et al., 80g:20005**
Scott, W. R. Primitive groups of degree 42. **80d:20003**
Smith, Fredrick On transitive permutation groups in which a 2-central involution fixes a unique point. **80d:20004**
A note on an Aschbacher theorem. **80d:20005**

Secondary classifications:

Yoshizawa, Mitsuo Remarks on multiply transitive permutation groups. **(80c:20006)**

20B15 Uniprimitive groups

Jones, Gareth A. Abelian subgroups of simply primitive groups of degree p^3, where p is prime. **80c:20004**
Weiss, Richard M. Permutation groups with projective unitary subconstituents. **80j:20002**

Secondary classifications:

Goldschmidt, David M. (*with* Scott, Leonard L.) A problem of W. A. Manning on primitive permutation groups. **(80a:20004)**
Scott, Leonard L. *See* **Goldschmidt, David M., (80a:20004)**

20B20 Multiply transitive finite groups

Cameron, Peter J. On doubly transitive permutation groups of degree prime squared plus one. **80h:20004**
Camina, Alan R. Inductive subgroups of flag transitive groups. **80h:20005**
Permutation groups of even degree whose 2-point stabilisers are isomorphic cyclic 2-groups. **80h:20006**
Chan, Gin Hor Minimal (k)-groups of degree n, $3k<n<4k$. **80e:20003**
Chillag, David Doubly transitive permutation groups which are not doubly primitive. **80a:20008**
Hering, Christoph A theorem on group spaces. **80h:20007**
Hiramine, Yutaka On doubly transitive permutation groups. **80a:20009**
Kerber, Adalbert A matrix of combinatorial numbers related to the symmetric groups. **80h:20008**
Lentin, André Sur certains ensembles constitués dans $\mathfrak{S}_{2n}$ par $2n-1$ involutions sans point fixe et discordantes. Étalantes, types, genres. (English summary) **80k:20003**
de Meur, G. Espaces de Fischer hermitiens. **80j:20003**
Monro, G. P. (*with* Taylor, D. E.) On multiply transitive permutation groups. **80c:20005**
Neumann, Peter M. (*with* Saxl, Jan) The primitive permutation groups of some special degrees. II. Small multiples of certain large primes. **80m:20002**
Praeger, Cheryl E. Doubly transitive automorphism groups of block designs. **80h:20009**
Saxl, Jan *See* **Neumann, Peter M., 80m:20002**
Taylor, D. E. *See* **Monro, G. P., 80c:20005**
Woltermann, Michael A note on doubly transitive solvable permutation groups. **80j:20004**
Yoshizawa, Mitsuo On $2p$-fold transitive permutation groups. **80b:20002**
Remarks on multiply transitive permutation groups. **80c:20006**

Secondary classifications:

Blake, Ian F. (*with* Cohen, Gérard; Deza, Mikhaïl) Coding with permutations. **(80k:05020)**
Cohen, Gérard *See* **Blake, Ian F.; et al., (80k:05020)**
Deza, Mikhaïl *See* **Blake, Ian F.; et al., (80k:05020)**
Heise, Werner (*with* Quattrocchi, Pasquale) Survey on sharply k-transitive sets of permutations and Minkowski-m-structures. **(80m:51006)**
Levingston, Richard Primitive permutation groups containing a cycle of prime power length. **(80a:20006)**
Quattrocchi, Pasquale *See* **Heise, Werner, (80m:51006)**

20B22 Multiply transitive infinite groups

Ngo Dak Tan Minimal transitive permutation groups on a countable set. (Russian. English summary) **80e:20004**
Yoshizawa, Mitsuo On infinite four-transitive permutation groups. **80k:20004**

20B25 Finite automorphism groups of algebraic, geometric, or combinatorial structures [See also 05Bxx, 12F10, 20G40, 20H30, 51–XX.]

Biggs, Norman (*with* White, Arthur T.) ★Permutation groups and combinatorial structures. **80k:20005**
Camina, Alan R. Groups acting flag-transitively on designs. **80j:20005**
Delaney, Matthew S. Groups of combinatorial automorphisms of space group orbits. I. **80b:20003**
White, Arthur T. *See* **Biggs, Norman, 80k:20005**

Secondary classifications:

Bachmann, Otto Über die Gruppenräume transitiver Permutationsgruppen. **(80m:51002)**
Böhm, J. (*with* Börner, W.; Hertel, E.; Krötenheerdt, Otto; Mögling, W.; Stammler, Ludwig) ★Geometrie. II. **(80h:51001)**
Börner, W. *See* **Böhm, J.; et al., (80h:51001)**
Cameron, Peter J. Permutation groups on unordered sets. **(80b:05001)**
Camina, Alan R. Inductive subgroups of flag transitive groups. **(80h:20005)**
Permutation groups of even degree whose 2-point stabilisers are isomorphic cyclic 2-groups. **(80h:20006)**
Erbach, D. W. (*with* Fisher, J.; McKay, John) Polynomials with PSL(2, 7) as Galois group. **(80m:12004)**
Fisher, J. *See* **Erbach, D. W.; et al., (80m:12004)**
Galvin, Fred (*with* Hesse, G.; Steffens, Karsten) On the number of automorphisms of structures. **(80b:03038)**
Hell, Pavol (*with* Quintas, Louis V.) Partial joins and graphs with given group, order, and size. **(80k:05065)**
Hertel, E. *See* **Böhm, J.; et al., (80h:51001)**
Hesse, G. *See* **Galvin, Fred; et al., (80b:03038)**
Ito, Noboru On a conjecture of C. W. Norman. I. **(80k:05017)**
Krötenheerdt, Otto *See* **Böhm, J.; et al., (80h:51001)**
Lefton, Phyllis On the Galois groups of cubics and trinomials. **(80m:12007)**
McKay, John Some remarks on computing Galois groups. **(80m:12005)**
See also **Erbach, D. W.; et al., (80m:12004)**
Mögling, W. *See* **Böhm, J.; et al., (80h:51001)**
Ostrom, T. G. Translation planes of odd order and odd dimension. **(80h:51005)**
Quintas, Louis V. *See* **Hell, Pavol, (80k:05065)**
Stammler, Ludwig *See* **Böhm, J.; et al., (80h:51001)**
Steffens, Karsten *See* **Galvin, Fred; et al., (80b:03038)**
Weiss, Richard M. Symmetric graphs with projective subconstituents. **(80h:05031)**

20B27 Infinite automorphism groups [See also 12F10.]

(Bird, E. H.) *See* **Stone, M. G., 80h:20010**
Bunts, A. Automorphisms of a triangular product. (Russian) **80m:20003**
Stone, M. G. A note on "Automorphism groups of partial orders" [Bull. Amer. Math. Soc. 79 (1973), 1011–1015; MR 47 #6820] by E. H. Bird. **80h:20010**

20B30 Symmetric groups, general

Droste, Manfred (*with* Göbel, Rüdiger) On a theorem of Baer, Schreier, and Ulam for permutations. **80g:20008**
Göbel, Rüdiger *See* **Droste, Manfred, 80g:20008**
Madsen Barbosa, Ruy Cycle index of symmetric group—direct proofs and determinant form. (Portuguese summary) **80g:20007**
Prakash, J. S. Molien series and cycle index of the symmetric group. **80d:20006**

Secondary classifications:

Sarvanov, V. I. On optimization of permutations. (Russian. English summary) **(80k:94051)**

20B35 Subgroups of symmetric groups

Secondary classifications:

Asatrjan, L. G. Monotone Boolean functions of intersections. (Russian. Armenian summary) **(80k:94038)**
de Bruijn, N. G. A note on the Cauchy-Frobenius lemma. **(80i:20015)**
Zacher, Giovanni The lattice of subgroups of the symmetric group. (Italian. English summary) **(80c:20043)**

20B99 None of the above, but in this section

Lausch, Hans Interpolation on the alternating group A_3. **80i:20002**
Sehgal, Surinder *See* **Woltermann, Michael, 80j:20006**
Woltermann, Michael (*with* Sehgal, Surinder) Equidistributed $\frac{3}{2}$-transitive solvable permutation groups. I, II. **80j:20006**

Secondary classifications:

Nöbauer, Wilfried On semigroups and groups of local polynomial functions. **(80k:20068)**

20Cxx Representation theory of groups

20C05 Group rings of finite groups and their modules [See also 16A26.]

Berger, Toby Solvable groups and algebraic modules. **80k:20011**
Brender, M. A class of Schur algebras. **80k:20006**
Carlson, Jon F. The dimensions of periodic modules over modular group algebras. **80d:20007**
Periodic modules with large periods. **80f:20003**
Carter, David W. Projective module groups of $SL_n(Z)$ and $GL_n(Z)$. **80m:20004**
Dyer, Micheal N. *See* **Sieradski, Allan J., 80k:20007**
Gupta, Narain D. (*with* Laffey, Thomas J.; Thomson, Michael W.) On the higher relation modules of a finite group. **80b:20012**
Laffey, Thomas J. *See* **Gupta, Narain D.; et al., 80b:20012**
Losey, Gerald (*with* Losey, Nora) The stable behavior of the augmentation quotients of the groups of order p^3. **80j:20007**
(*with* Losey, Nora) Augmentation quotients of some nonabelian finite groups. **80d:20008**
Losey, Nora *See* **Losey, Gerald, 80d:20008** *and* **Losey, Gerald, 80j:20007**
Moran, Gadi Some coefficients in the center of the group algebra of the symmetric group. **80a:20010**
Sieradski, Allan J. (*with* Dyer, Micheal N.) Distinguishing arithmetic for certain stably isomorphic modules. **80k:20007**
Thomson, Michael W. *See* **Gupta, Narain D.; et al., 80b:20012**
Williams, Julian S. Trace ideals of relation modules of finite groups. **80b:20004**

Secondary classifications:

Bedi, Surinder Singh The Jacobson radical of the group algebra of a finite group. **(80d:16007)**
Kondo, Shoichi Zero-divisors of character rings of finite groups. **(80g:16012)**
Menal, Pere Group rings in which every left ideal is a right ideal. **(80m:16009)**
Neumann, Walter D. ★Equivariant Witt rings. **(80a:57010)**

20C07 Group rings of infinite groups and their modules [See also 16A27.]

Gupta, Chander Kanta Subgroups of free groups induced by certain products of augmentation ideals. **80b:20013**
Krop, L. E. Remarks on stable varieties of representations of groups. (Russian) **80m:20005**
Kublanova, E. M. The Jacobson radical and indecomposable varieties of representations of groups. (Russian) **80m:20006**
Lorenz, Martin (*with* Passman, D. S.) Centers and prime ideals in group algebras of polycyclic-by-finite groups. **80f:20005**
Analogs of Clifford's theorem for polycyclic-by-finite groups. **80f:20004**

Passi, Inder Bir S. The associated graded ring of a group ring. **80k:20008**
★Group rings and their augmentation ideals. **80k:20009**
Passman, D. S. *See* **Lorenz, Martin, 80f:20005**
Polcino Milies, Francisco César Group rings whose units form an FC-group. **80f:20006a**
Corrigendum: "Group rings whose units form an FC-group" (Arch. Math. (Basel) 30 (1978), no. 4, 380–384). **80f:20006b**
Sandling, Robert (*with* Tahara, Ken-Ichi) Augmentation quotients of group rings and symmetric powers. **80h:20014**
Tahara, Ken-Ichi *See* **Sandling, Robert, 80h:20014**
Wehrfritz, B. A. F. Nilpotence in groups of semilinear maps. III. **80h:20015**
Williamson, Alan On the conjugacy classes in an integral group ring. **80e:20005**

Secondary classifications:

Dicks, Warren Hereditary group rings. **(80k:16017)**
Menal, Pere Group rings in which every left ideal is a right ideal. **(80m:16009)**
Roseblade, J. E. (*with* Smith, Patrick F.) A note on the Artin-Rees property of certain polycyclic group algebras. **(80h:16008)**
Sehgal, Sudarshan K. ★Topics in group rings. **(80j:16001)**
Smith, Patrick F. *See* **Roseblade, J. E., (80h:16008)**

20C10 Integral representations of finite groups

Charlap, L. S. (*with* Vasquez, A. T.) Multiplication of integral representations of some dihedral groups. **80g:20009**
tom Dieck, Tammo Homotopy equivalent group representations and Picard groups of the Burnside ring and the character ring. **80b:20005**
Reiner, Irving Integral representations of cyclic p-groups. **80b:20006**
Invariants of integral representations. **80h:20016**
(*with* Roggenkamp, Klaus W.) ★Integral representations. **80k:20010**
On Diederichsen's formula for extensions of lattices. **80j:20008**
Roggenkamp, Klaus W. *See* **Reiner, Irving, 80k:20010**
Ullom, Stephen V. Swan modules, class fields, and class groups of cyclic p-groups. **80h:20017**
Vasquez, A. T. *See* **Charlap, L. S., 80g:20009**

Secondary classifications:

Cassou-Noguès, Philippe Quelques théorèmes de base normale d'entiers. (English summary) **(80j:12011)**
Gibbs, David E. Witt classes of integral representations of an abelian 2-group. **(80k:57062)**
Oliver, Robert Group actions on disks, integral permutation representations, and the Burnside ring. **(80j:57040)**
Petrie, Ted Pseudoequivalences of G-manifolds. **(80e:57039)**
Reiner, Irving Integral representations: genus, K-theory and class groups. **(80b:16008)**
Schwänzl, Roland On the spectrum of the Burnside ring. **(80k:57069)**
Ullom, Stephen V. Class groups of cyclotomic fields and group rings. **(80k:12015)**
Williams, Julian S. Trace ideals of relation modules of finite groups. **(80b:20004)**

20C11 p-adic representations of finite groups

Barannik, L. F. (*with* Gudikov, P. M.) Crossed group rings of finite groups and of rings of entire p-adic integers with a finite number of irreducible integral representations. (Russian) **80h:20018**
Gudikov, P. M. *See* **Barannik, L. F., 80h:20018**
Puig, Lluis Sur un théorème de Green. **80e:20006**
Spiegel, Eugene (*with* Trojan, Allan) The Schur subgroup of a p-adic field. **80e:20007**
Trojan, Allan *See* **Spiegel, Eugene, 80e:20007**

20C12 Integral representations of infinite groups

Secondary classifications:

Barannik, L. F. (*with* Gudikov, P. M.) Crossed group rings of finite groups and of rings of entire p-adic integers with a finite number of irreducible integral representations. (Russian) **(80h:20018)**
Gudikov, P. M. *See* **Barannik, L. F., (80h:20018)**

20C15 Ordinary representations and characters

Basmaji, B. G. Complex representations of metacyclic groups. **80b:20007**
Blau, Harvey I. Brauer trees and character degrees. **80e:20008**
Degrees of exceptional characters of certain finite groups. **80d:20009**
van den Broek, P. M. (*with* Cornwell, J. F.) Clebsch-Gordan coefficients of symmetry groups. (German summary) **80b:20008**
Brown, E. *See* **Meisel, L. V.; et al., 80e:20010**
Camina, Alan R. Some conditions which almost characterize Frobenius groups. **80a:20011**
Černý, V. V. A graphic method for finding the Clebsch-Gordan series for a symmetric group. (Russian) **80c:20007**
Cornwell, J. F. *See* **van den Broek, P. M., 80b:20008**
Čubarov, I. A. Normal subgroups of M-groups. **80c:20008**
Dade, Everett C. Caractères venant des $\mathfrak{F}$-normalisateurs d'un groupe fini résoluble. **80g:20010**
Fein, Burton Minimal splitting fields for group representations. II. **80c:20009**
Ford, Charles Groups which determine the Schur index of a representation. **80i:20003**
Gray, D. M. *See* **Meisel, L. V.; et al., 80e:20010**
Hikari, Michitaka A characterization of the R-elementary groups at 2 with characters of Schur index 2 over R. **80j:20009**
Howlett, Robert B. Extending characters from normal subgroups. **80b:20009**
Huppert, Bertram Elementary remarks on Clifford's theory. **80e:20009**
Knörr, Reinhard On the vertices of irreducible modules. **80f:20007**
Leitz, Manfred Über die Grade der irreduziblen Charaktere endlicher Gruppen. **80d:20010**
McMullen, J. R. (*with* Price, John F.) Reversible hypergroups. (Italian summary) **80c:20010**
Meisel, L. V. (*with* Gray, D. M.; Brown, E.) The structure of groups with index-3 subgroups. **80e:20010**
Merris, Russell Subgroups normal modulo the zeros of an irreducible character. **80a:20012**
Morgan, C. L. On relations for representations of finite groups. **80d:20011**
Price, John F. *See* **McMullen, J. R., 80c:20010**
Puig, Lluis Structure locale et caractères. **80k:20011**
Shalen, Peter B. Linear representations of certain amalgamated products. **80e:20011**
Taketa, Kiyosi Über die monomialen Gruppen. VII. Über die Gruppen, deren Darstellungen sich sämtlich auf monomiale Gestalt transformieren lassen. **80g:20011**
Vovsi, S. M. Infinite triangular products of representations of groups. (Russian) **80g:20012**
Watanabe, Atumi On Fong's reductions. **80g:20013**
Willems, Wolfgang Über die Existenz von Blöcken. **80c:20011**
Yamada, Toshihiko More on the Schur index and the order and exponent of a finite group. **80a:20013**
A remark on Schur indices of p-groups. **80d:20012**

Secondary classifications:

Bannai, Eiichi On some spherical t-designs. **(80j:05029)**
Benard, Mark Schur indexes of sporadic simple groups. **(80e:20022)**
Chan, Gin Hor (k)-characters and the triviality of symmetry classes. **(80k:15039a)**
(k)-characters and the triviality of symmetry classes. II. **(80k:15039b)**
Funakura, Takeo On Artin theorem of induced characters. **(80b:12006)**
James, G. D. A note on the decomposition matrices of $\mathfrak{S}_{12}$ and $\mathfrak{S}_{13}$ for the prime 3. **(80a:20005)**
Lorenz, Falko Zur Schurgruppe eines lokalen Körpers. **(80m:12014)**
Lusztig, George Unipotent representations of a finite Chevalley group of type E_8. **(80j:20041)**
Merris, Russell Linearly independent permutation characters afforded by action on tensor spaces. **(80c:15018)**
Recent advances in symmetry classes of tensors. **(80k:15040)**
Romanovskiĭ, A. V. Finite groups with a Frobenius subgroup. (Russian) **(80m:20022)**
van der Waall, Robert W. On the structure of the minimal non-M-groups. **(80c:20025)**

20C20 Modular representations and characters

Alperin, J. L. Projective modules for SL(2, 2^n). **80e:20012**
Broué, Michel Local structure and characters in block theory. **80e:20013**
Radical, hauteurs, p-sections et blocs. **80a:20014**
Brauer coefficients of p-subgroups associated with a p-block of a finite group. **80d:20013**
Burkhardt, R. The decomposition numbers of the Suzuki groups for the prime 2. **80e:20014**
Burry, David W. The distribution of modular representations into blocks. **80j:20010**
Donovan, Peter Report on dihedral defect groups. **80e:20015**
(*with* Freislich, M.-R.) The indecomposable modular representations of certain groups with dihedral Sylow subgroup. **80b:20019**
Dihedral defect groups. **80d:20014**
Erdmann, Karin Blocks whose defect groups are Klein four groups. **80i:20004**
On 2-blocks with semidihedral defect groups. **80m:20007**
Freislich, M.-R. *See* **Donovan, Peter, 80b:20019**
Green, J. A. Endomorphism rings of some modular representations. **80f:20008**
Gres', P. G. Blocks and sections of finite groups. (Russian) **80c:20012**
Herzog, Marcel (*with* Praeger, Cheryl E.) On characters in the principal 2-block. II. **80g:20014**
Higman, D. G. Systems of configurations. **80m:20008**
Humphreys, J. E. (*with* Jantzen, Jens C.) Blocks and indecomposable modules for semisimple algebraic groups. **80d:20015**
Iizuka, Kenzo (*with* Watanabe, Atumi) A remark on the representations of finite groups. V. **80g:20015**
Jantzen, Jens C. *See* **Humphreys, J. E., 80d:20015**
Kühlshammer, B. On 2-blocks with wreathed defect groups. **80e:20016**
May, Warren Modular group algebras of totally projective p-primary groups. **80j:20011**
Michler, Gerhard O. Sur l'égalité des défauts d'un bloc et la correspondance de Green. **80c:20013**
Pazderski, Gerhard One-headed representation modules of abelian p-groups over a field of characteristic p. **80g:20016**
Praeger, Cheryl E. *See* **Herzog, Marcel, 80g:20014**
Renaud, J. C. The characters and structure of a class of modular representation algebras of cyclic p-groups. **80g:20017**
The decomposition of products in the modular representation ring of a cyclic group of prime power order. **80g:20018**
Tsushima, Yukio Some notes on the radical of a finite group ring. **80b:20010**
Upadhyaya, B. Shreekantha Composition factors of the principal indecomposable modules for the special linear group SL(2, q). **80m:20009**
Watanabe, Atumi *See* **Iizuka, Kenzo, 80g:20015**
Willems, Wolfgang On Brauer's induction theorem. **80j:20012a**
A note on Brauer's induction theorem. **80j:20012b**

Secondary classifications:

Dade, Everett C. Endo-permutation modules over p-groups. I. **(80a:13008a)**
Endo-permutation modules over p-groups. II. **(80a:13008b)**

Puig, Lluis Sur un théorème de Green. **(80e:20006)**
Sarowski, David B. Permutation characters of finite groups of Lie type. **(80i:20020)**
Yoshida, Tomoyuki On the Hall-Higman and Shult theorems. **(80c:20026)**
Aarhus *See* **Proceedings: Symposium on Modular Representations of Finite Groups, (80d:20002)**
Finite groups *See* **Proceedings: Symposium on Modular Representations of Finite Groups, (80d:20002)**
Proceedings:
Symposium on Modular Representations of Finite Groups ★Proceedings of the Symposium on Modular Representations of Finite Groups. **(80d:20002)**
Symposium:
Modular Representations of Finite Groups *See* **Proceedings: Symposium on Modular Representations of Finite Groups, (80d:20002)**

20C25 Projective representations and multipliers

van den Broek, P. M. Selection rules for Shubnikov space groups. **80a:20015**
Cariñena, José F. (*with* Santander, Mariano) Representation groups for semiunitary projective representations of finite groups. **80j:20013**
Humphreys, J. F. Rational projective representations of finite groups. **80j:20014**
Nguyen-Quang-Do Thong Sur le multiplicateur de Schur d'un p-groupe. **80c:20014**
Santander, Mariano *See* **Cariñena, José F., 80j:20013**

Secondary classifications:

Singh, T. Gokulchandra Some bounds for the multiplicator of a finite group. **(80j:20049)**

20C30 Representations of finite symmetric groups and other special finite groups

Duxaud, René Formules de Gamba et représentations linéaires du groupe symétrique. **80c:20017**
Dye, R. H. Symmetric groups as maximal subgroups of orthogonal and symplectic groups over the field of two elements. **80m:20010**
Foulkes, H. O. Recurrences for characters of the symmetric group. **80a:20016**
Frame, J. S. Character formulas for the orthogonal groups over GF(2). **80k:20012a**
Character formulas for the orthogonal groups over GF(2). II. **80k:20012b**
Garsia, Adriano M. (*with* Remmel, J. B.) On the raising operators of Alfred Young. **80e:20018**
Hoffman, Peter Products of representations of wreath products. **80j:20015**
Ishaq, M. (*with* Merris, Russell) Matrix functions afforded by entries of unitary representations. **80h:20020**
James, G. D. ★The representation theory of the symmetric groups. **80g:20019**
See also **Peel, M. H., 80h:20021**
Lehrer, G. I. On a conjecture of Alperin and McKay. **80g:20020**
Merris, Russell *See* **Ishaq, M., 80h:20020**
Mullineux, G. Bijections of p-regular partitions and p-modular irreducibles of the symmetric groups. **80j:20016**
Peel, M. H. (*with* James, G. D.) Specht series for skew representations of symmetric groups. **80h:20021**
Remmel, J. B. *See* **Garsia, Adriano M., 80e:20018**
Snapper, Ernst Characteristic polynomials of a permutation representation. **80d:20016**
Tappe, Jürgen On the blocks of certain subgroups of monomial groups. II. **80m:20011**
Turán, Pál Remarks on the characters belonging to the irreducible representations of the symmetric group S_n of n letters. **80g:20021**
Wunk, Barbara Representation of the Sylow-subgroups ($p>2$) of the permutation groups by the automorphism groups of certain universal algebras. (Polish. English summary) **80b:20011**

Secondary classifications:

Daniel, Charles F. Orthogonal functions on some permutation groups. **(80d:33007)**
Evens, Leonard (*with* Kahn, Daniel S.) Chern classes of certain representations of symmetric groups. **(80k:55053)**
Fässler, A. (*with* Schwarzenbach, H.) Symmetriegerechte Polynome von Punktgruppen. (English summary) **(80h:22005)**
Foata, Dominique A matrix analog for Viennot's construction of the Robinson correspondence. **(80k:05011)**
Greene, Curtis (*with* Nijenhuis, Albert; Wilf, Herbert S.) A probabilistic proof of a formula for the number of Young tableaux of a given shape. **(80b:05016)**
Kacser, C. (*with* Rosen, S. P.) Three-pion states and a new approach to the permutation group S_3. I. **(80a:81112a)**
(*with* Rosen, S. P.) Three-pion states and a new approach to the permutation group S_3. II. Pseudoscalar-meson decays. **(80a:81112b)**
Kahn, Daniel S. *See* **Evens, Leonard, (80k:55053)**
Knutson, Donald Characteristic classes of permutation representations. I. The spin of a permutation. **(80l:55017)**
May, Warren Modular group algebras of totally projective p-primary groups. **(80j:20011)**
Naruki, Isao Über die Kleinsche Ikosaeder-Kurve sechsten Grades. **(80d:14021)**
Nijenhuis, Albert *See* **Greene, Curtis; et al., (80b:05016)**
Rosen, S. P. *See* **Kacser, C., (80a:81112a)** *and* **Kacser, C., (80a:81112b)**
Schwarzenbach, H. *See* **Fässler, A., (80h:22005)**
So, S. I. (*with* Strottman, D.) Wigner coefficients for $SU(6)\supset SU(3)\otimes SU(2)$. **(80b:81047)**
Strottman, D. *See* **So, S. I., (80b:81047)**
Upadhyaya, B. Shreekantha Filtrations with Weyl module quotients of the principal indecomposable modules for the group $SL(2, q)$. **(80j:20045)**
Wilf, Herbert S. *See* **Greene, Curtis; et al., (80b:05016)**

20C32 Representations of infinite symmetric groups and other special infinite groups

Beynon, W. M. (*with* Lusztig, George) Some numerical results on the characters of exceptional Weyl groups. **80a:20017**
Lusztig, George *See* **Beynon, W. M., 80a:20017**

Secondary classifications:

Lascoux, Alain (*with* Schützenberger, Marcel Paul) Croissance des polynômes de Foulkes-Green. (English summary) **(80d:20052)**
Schützenberger, Marcel Paul *See* **Lascoux, Alain, (80d:20052)**

20C35 Applications to physics

Bošović, I. B. (*with* Vujičić, M.; Herbut, F.) Irreducible representations of the symmetry groups of polymer molecules. I. **80b:20012**
Burns, Gerald ★Introduction to group theory with applications. **80f:20009**
Herbut, F. *See* **Bošović, I. B.; et al., 80b:20012**
Kerber, Adalbert The diagram lattice as structural principle in mathematics. **80a:20018**
Kopský, Vojtěch Extended integrity bases of finite groups. **80g:20022**
Vujičić, M. *See* **Bošović, I. B.; et al., 80b:20012**

Secondary classifications:

Beynon, W. M. (*with* Lusztig, George) Some numerical results on the characters of exceptional Weyl groups. **(80a:20017)**
van den Broek, P. M. Selection rules for Shubnikov space groups. **(80a:20015)**
Clebsch-Gordan coefficients of finite magnetic groups. **(80k:81048)**
Budini, Paolo Reflection groups and internal-symmetry algebras. (Italian and Russian summaries) **(80k:81049)**
Butler, P. H. (*with* Reid, M. F.) j symbols and jm factors for all dihedral and cyclic groups. **(80g:20060)**
Combe, Ph. (*with* Rodriguez, R.; Sirugue-Collin, M.; Sirugue, M.) A uniqueness theorem for anticommutation relations and commutation relations of quantum spin systems. **(80f:82047)**
Cracknell, A. P. (*with* Davies, B. L.; Kunert, H.; Popenda, J.; Suffczyński, Maciej) Selection rules for the holosymmetric double space groups based on the body-centred cubic Bravais lattice. **(80i:82025)**
Davies, B. L. *See* **Cracknell, A. P.; et al., (80i:82025)**
Dirl, R. Clebsch-Gordan coefficients: general theory. **(80g:81023a)**
Multiplicities for space group representations. **(80g:81023b)**
Clebsch-Gordan coefficients for space groups. **(80g:81023c)**
Clebsch-Gordan coefficients for $Pn3n$. **(80g:81023d)**
Coupling coefficients: general theory. **(80i:81017a)**
Complex conjugation of space group representations. **(80i:81017b)**
Coupling coefficients for space groups. **(80i:81017c)**
Coupling coefficients for $Pn3n$. **(80i:81017d)**
Folland, N. O. Factored irreducible symmetry operators and space groups. **(80e:81025)**
Frei, H. (*with* Günthard, Hs. H.) Symmetry of non-rigid molecules. **(80b:82015)**
Günthard, Hs. H. *See* **Frei, H., (80b:82015)**
van Holten, J. W. *See* **de Wit, Bernard, (80g:83041)**
Kanamori, Hitoshi *See* **Matsumoto, Masao, (80c:82054)**
Kopský, Vojtěch A simplified calculation and tabulation of tensorial covariants for magnetic point groups belonging to the same Laue class. **(80i:81018)**
Tensorial covariants for the 32 crystal point groups. **(80i:82026)**
Extended integrity bases of irreducible matrix groups—the crystal point groups. **(80e:20060a)**
Clebsch-Gordan products and extended integrity bases of crystallographic double point groups. **(80e:20060b)**
Kornacker, Karl Erratum: "Discrete finite nilpotent Lie analogs: new models for unified gauge field theory" [J. Math. Phys. **19** (1978), no. 7, 1584–1586; MR **58** #14473]. **(80i:81041)**
Kunert, H. *See* **Cracknell, A. P.; et al., (80i:82025)**
Kustov, E. F. (*with* Zaharov, N. A.; Steczko, G.) Application of unitary groups for determining tensor components in crystals and selection principles for phase transitions. **(80h:82033)**
Lusztig, George *See* **Beynon, W. M., (80a:20017)**
Maekawa, Takayoshi Note on the linear representations of any dimensional Lorentz group and their matrix elements. **(80h:22018)**
Matsumoto, Masao (*with* Kanamori, Hitoshi) Correlation of irreducible representations in symmorphic space groups and their application to morphic effects on two-phonon infrared and Raman spectra. **(80c:82054)**
McMullen, J. R. (*with* Price, John F.) Reversible hypergroups. (Italian summary) **(80c:20010)**
Michel, Louis Topological classification of symmetry defects in ordered media. **(80b:82007)**
Mukunda, N. Descriptions of operators in quantum mechanics. **(80j:81029)**
Popenda, J. *See* **Cracknell, A. P.; et al., (80i:82025)**
Price, John F. *See* **McMullen, J. R., (80c:20010)**
Primas, H. Kinematical symmetries in molecular quantum mechanics. **(80c:81039)**
Reid, M. F. *See* **Butler, P. H., (80g:20060)**
Rodriguez, R. *See* **Combe, Ph.; et al., (80f:82047)**
Rudra, P. (*with* Sikdar, M. K.) Group theoretical analysis of second-order phase transitions in magnetic structures. **(80f:81117)**
Sikdar, M. K. *See* **Rudra, P., (80f:81117)**
Sinivee, V. A group-theoretic approach to the dynamics of multispin systems. VI. (Russian. Estonian and English summaries) **(80m:81038)**
Sirugue, M. *See* **Combe, Ph.; et al., (80f:82047)**
Sirugue-Collin, M. *See* **Combe, Ph.; et al., (80f:82047)**
Steczko, G. *See* **Kustov, E. F.; et al., (80h:82033)**

Suffczyński, Maciej *See* **Cracknell, A. P.; et al., (80f:82025)**
de Wit, Bernard (*with* van Holten, J. W.) Multiplets of linearized SO(2) supergravity. **(80g:83041)**
Properties of SO(8) extended supergravity. **(80f:83039)**
Yessing Hansen, Flemming Generation of symmetry coordinates for crystals using multiplier representations of the space groups. **(80d:82059)**
Zaharov, N. A. *See* **Kustov, E. F.; et al., (80h:82033)**

20C99 None of the above, but in this section

Alperin, J. L. (*with* Broué, Michel) Local methods in block theory. **80f:20010**
van den Broek, P. M. On the type and the standard form of induced UA representations. **80f:20011**
Broué, Michel *See* **Alperin, J. L., 80f:20010**
Kan, Daniel M. (*with* Miller, Edward Y.) Representations in nilpotent groups. **80b:20013**
Miller, Edward Y. *See* **Kan, Daniel M., 80b:20013**
Öiglane, H. Representation of a Clifford group on the set of one-dimensional representations of the same group. (Russian) **80f:20012**
Plotkin, B. I. Remarks on small varieties of representations of groups. (Russian) **80m:20012**
Varieties in representations of finite groups. Locally stable varieties. Matrix groups and varieties of representations. (Russian) **80j:20017**
Schützenberger, Marcel Paul Propriétés nouvelles des tableaux de Young. **80g:20023**
Vovci, S. M. Semigroups of radical classes of representations of groups and associative algebras. (Russian) **80h:20022**

Secondary classifications:

Belousov, P. V. (*with* Sidonskiĭ, O. B.) Dual operators in lattices. (Russian) **(80g:33025)**
Chastkofsky, Leonard (*with* Feit, Walter) Projective characters of groups of Lie type. **(80b:20059)**
Desmier, P. E. (*with* Sharp, R. T.) Polynomial tensors for double point groups. **(80b:81042)**
Evens, Leonard (*with* Kahn, Daniel S.) An integral Riemann-Roch formula for induced representations of finite groups. **(80k:55054)**
Feit, Walter *See* **Chastkofsky, Leonard, (80b:20059)**
Kahn, Daniel S. *See* **Evens, Leonard, (80k:55054)**
Peck, G. W. Short proof of a general weight Burnside lemma. **(80g:05007)**
Serre, Jean-Pierre ★Représentations linéaires des groupes finis. **(80f:20001)**
Sharp, R. T. *See* **Desmier, P. E., (80b:81042)**
Sidonskiĭ, O. B. *See* **Belousov, P. V., (80g:33025)**
Vovsi, S. M. Prevarieties of generalized stable groups. (Russian) **(80c:20040)**

20Dxx Abstract finite groups

Secondary classifications:

Smith, Fredrick On transitive permutation groups in which a 2-central involution fixes a unique point. **(80d:20004)**

20D05 Classification of simple and nonsolvable groups

Aleksandrov, A. G. (*with* Komissarčik, È. A.) Simple groups with a small number of conjugate classes. (Russian) **80a:20019**
Alex, Leo J. Index two simple groups. II. **80h:20023**
Aschbacher, Michael An introduction to the classification of finite simple groups. **80b:20014**
Baumann, Bernd Über endliche Gruppen mit einer zu $L_2(2^n)$ isomorphen Faktorgruppe. **80g:20024**
Brauer, Richard Dagobert Blocks of characters and structure of finite groups. **80f:20013**
Chang, Sinu Chi A characterization of group PSL(6, 2^n) by its 3-structures. I. **80i:20005**
On groups with Sp(6, 4^n)-type 3-centralizers. **80e:20019**
Dickson, N. K. Groups with dihedral 3-normalizers of order $4k$. I. **80g:20025a**
Groups with dihedral 3-normalizers of order $4k$. II. **80g:20025b**
Di Martino, Lino Simple linear groups all of whose involutions are 2-reflections. (Italian summary) **80c:20015**
Ferguson, Pamela A. On bounded simple groups of type $(2, (n))$. **80j:20018**
(*with* Smith, Stephen D.) Strongly self-centralizing Sylow 3-groups. **80f:20014**
Finkelstein, Larry (*with* Frohardt, Daniel) A 3-local characterization of $L_7(2)$. **80f:20015**
Frohardt, Daniel *See* **Finkelstein, Larry, 80f:20015**
Gomi, Kensaku Finite groups with a standard subgroup isomorphic to Sp(4, 2^n). **80h:20024**
Gorenstein, Daniel The classification of finite simple groups. I. Simple groups and local analysis. **80b:20015**
Griess, Robert L., Jr. (*with* Solomon, Ronald) Finite groups with unbalancing 2-components of $\{\hat{L}_3(4), \mathrm{He}\}$-type. **80k:20013**
Harada, Koichiro The automorphism group and the Schur multiplier of the simple group of order $2^{14}\cdot 3^6\cdot 5^6\cdot 7\cdot 11\cdot 19$. **80c:20016**
On Yoshida's transfer. **80c:20017**
Herzog, Marcel On the classification of finite simple groups by the number of involutions. **80m:20013**
Ho, C. Y. Finite simple groups. (Portuguese) **80d:20017**
Il'inyh, A. P. Characterization of the simple O'Nan-Sims group by the centralizer of an element of order three. (Russian) **80b:20016**
Janko, Zvonimir On the finite simple groups (according to Aschbacher and Gorenstein). **80m:20014**
Komissarčik, È. A. *See* **Aleksandrov, A. G., 80a:20019**
Kondrat'ev, A. S. Finite groups whose Sylow 2-subgroup contains an elementary abelian subgroup of index 4. (Russian) **80a:20020**
Lempken, Wolfgang A 2-local characterization of Janko's simple group J_4. **80g:20026**
McKay, John (*with* Young, Kiang Chuen) The nonabelian simple groups G, $|G| < 10^6$—minimal generating pairs. **80d:20018**
Niles, Richard Pushing-up in finite groups. **80g:20027**
Reifart, Arthur On finite simple groups with large extraspecial subgroups. I. **80j:20019a**
On finite simple groups with large extraspecial subgroups. II. **80j:20019b**
Romanovskiĭ, A. V. Simple finite groups with a complemented F-subgroup. (Russian) **80c:20020**
Sandlöbes, Hedwig (*with* Schoenwaelder, Ulrich) The core-free groups of Sylow-2-type M_{24}. **80e:20021**
Schoenwaelder, Ulrich *See* **Sandlöbes, Hedwig, 80e:20021**
Sitnikov, V. M. Finite groups with a standard component isomorphic to M_{24}. (Russian) **80k:20014**
Smith, Stephen D. On maximal-class 3-groups and strong 3-embedding. **80d:20019**
See also **Ferguson, Pamela A., 80f:20014**
Solomon, Ronald (*with* Timmesfeld, Franz) A note on tightly embedded subgroups. **80b:20017**
See also **Griess, Robert L., Jr., 80k:20013**
Stroth, Gernot An odd characterization of J_4. **80b:20018**
A fusion lemma for a certain class of groups of characteristic 2-type. **80c:20018**
A characterization of .3. **80h:20025**
Subbotin, I. Ja. Finite unsolvable groups with a quasicentralizer condition for normal divisors. (Russian) **80i:20006**
Timmesfeld, Franz On the structure of 2-local subgroups in finite groups. **80d:20020**
See also **Solomon, Ronald, 80b:20017**
Tran Van Trung Finite simple groups in which the centralizer M of some involution is solvable and the generalized Fitting group of M is extraspecial. **80h:20026**
Usami, Yoko A characterization of some type of PSL(2, q). **80a:20021**
van der Waall, Robert W. On the structure of the groups related to the 3-local subgroups of the finite simple groups of Ree type. **80j:20020**
Wester, Michael Endliche Gruppen, die eine Involution z besitzen, so daß $F^*(C(z))$ das direkte Produkt einer extraspeziellen 2-Gruppe von kleiner Weite mit einer elementar-abelschen 2-Gruppe ist. I. **80k:20015**
Yamada, Hiromichi Finite groups with a standard subgroup isomorphic to $G_2(2^n)$. **80g:20028**
Finite groups with a standard subgroup isomorphic to ${}^3D_4(2^{3n})$. **80k:20016**
Young, Kiang Chuen *See* **McKay, John, 80d:20018**

Secondary classifications:

Burkhardt, R. The decomposition numbers of the Suzuki groups for the prime 2. **(80c:20014)**
Camina, Alan R. (*with* McDermott, J. P. J.) On $\frac{3}{2}$-transitive Frobenius regular groups. **(80j:20001)**
Danil'čenko, T. N. (*with* Kononenko, A. F.) Regularization of many-step games between two persons with a fixed sequence of moves. **(80a:90175)**
Güloğlu, İsmail Şuayip A characterization of the simple group He. **(80k:20018)**
Harada, Koichiro Finite groups having 2-local subgroups $E_{16}\cdot L_4(2)$. **(80b:20030)**
Kononenko, A. F. *See* **Danil'čenko, T. N., (80a:90175)**
Mazet, Pierre Sur le multiplicateur de Schur du groupe de Mathieu M_{22}. (English summary) **(80m:20032)**
McDermott, J. P. J. *See* **Camina, Alan R., (80j:20001)**
Sozutov, A. I. Groups with Frobenius pairs of conjugate elements. (Russian) **(80d:20031)**

20D06 Simple groups: alternating and classical groups [See also 20Gxx, 22Exx.]

Baumann, Bernd Endliche Gruppen mit einer 2-zentralen Involution, deren Zentralisator 2-abgeschlossen ist. **80k:20017**
Bierbrauer, Jürgen A characterization of the "baby monster" F_2, including a note on ${}^2E_6(2)$. **80h:20027**
Durakov, B. K. Characterization of some simple finite groups by a centralizer of elements of order three. (Russian) **80m:20015**
Ferguson, Pamela A. On finite simple groups with a self-centralization system of type $(2(n))$. **80b:20019**
Gentile, Enzo R. A note on the simplicity of alternating groups. **80g:20029**
Ishibashi, Hiroyuki Generators of an orthogonal group over a finite field. **80a:20022a**
Correction to the paper: "Generators of an orthogonal group over a finite field" (Czechloslovak Math. J. **28(103)** (1978), no. 3, 419–433). **80a:20022b**
Pal'čik, È. M. Finite simple groups whose Sylow 2-subgroup contains a cyclic subgroup of index 16. (Russian) **80m:20016**
Syskin, S. A. Finite groups with primary centralizers of four-subgroups. (Russian) **80c:20019**

Secondary classifications:

Cooperstein, Bruce N. An enemies list for factorization theorems. **(80a:20052)**
Griess, Robert L., Jr. Finite groups whose involutions lie in the center. **(80c:20031)**
Reifart, Arthur On finite simple groups with large extraspecial subgroups. I. **(80j:20019a)**
On finite simple groups with large extraspecial subgroups. II. **(80j:20019b)**
Romanovskiĭ, A. V. Finite groups with a Frobenius subgroup. (Russian) **(80m:20022)**
Seidel, J. J. The pentagon. **(80f:51008)**

20D08 Simple groups: sporadic groups

Benard, Mark Schur indexes of sporadic simple groups. **80e:20022**
Bierbrauer, Jürgen A 2-local characterization of the Rudvalis simple group. **80k:20028**
Cannon, John J. (*with* McKay, John; Young, Kiang Chuen) The nonabelian simple groups G, $|G| < 10^5$ — presentations. **80e:20023**
Güloğlu, İsmail Şuayip A characterization of the simple group He. **80k:20018**
Kroll, Ove (*with* Landrock, Peter) The characters of some 2-blocks of the babymonster,

its covering group and the monster. **80f:20016**

Landrock, Peter The non-principal 2-blocks of sporadic simple groups. **80b:20020**
See also **Kroll, Ove, 80f:20016**

McKay, John The non-abelian simple groups G, $|G| < 10^6$ — character tables. **80c:20024**
See also **Cannon, John J.; et al., 80e:20023**

Smith, Stephen D. Large extraspecial subgroups of widths 4 and 6. **80g:20030**

Stafford, Richard M. A characterization of Janko's simple group J_4 by centralizers of elements of order 3. **80h:20029**

Young, Kiang Chuen *See* **Cannon, John J.; et al., 80e:20023**

Secondary classifications:

Bierbrauer, Jürgen A characterization of the "baby monster" F_2, including a note on ${}^2E_6(2)$. **(80h:20027)**

Buekenhout, Francis The geometry of diagrams. **(80b:51005)**

Durakov, B. K. Characterization of some simple finite groups by a centralizer of elements of order three. (Russian) **(80m:20015)**

Wester, Michael Endliche Gruppen, die eine Involution z besitzen, so daß $F^*(C(z))$ das direkte Produkt einer extraspeziellen 2-Gruppe von kleiner Weite mit einer elementar-abelschen 2-Gruppe ist. I. **(80k:20015)**

20D10 Solvable groups, theory of formations, π-length, ranks, factorable groups, p-groups

Álvarez Dotú, A. A local definition of Fitting classes. (Spanish) **80j:20021**

Arad, Zvi (*with* Chillag, David) Injectors of finite solvable groups. **80e:20025**
(*with* Chillag, David) Finite groups with conditions on the centralizers of π-elements. **80j:20022**

Baer, Reinhold The embedding relation derived from a formation. **80h:20030**

Barišovec', P. P. Finite nonabelian 2-groups with complemented nonabelian subgroups. (Russian) **80c:20020**

Baskaran, S. A characterization of finite groups with cyclic Sylow subgroups. **80a:20023**

Bellani Tamburini, Maria Chiara *See* **Bianchi, Mariagrazia, 80a:20024**

Berthold, Dennis (*with* Walls, Gary) Finite quasi-injective groups. **80b:20021**

Bianchi, Mariagrazia (*with* Bellani Tamburini, Maria Chiara) On finite IM-groups and their duals. (Italian. English summary) **80a:20024**

Bryce, R. A. (*with* Cossey, John) Subgroup closed Fitting classes. **80g:20031**

Chillag, David *See* **Arad, Zvi, 80e:20025** *and* **Arad, Zvi, 80j:20022**

Cossey, John *See* **Bryce, R. A., 80g:20031**

Finkel, David (*with* Lundgren, J. Richard) Solvability of factorizable groups. I. **80j:20023a**
(*with* Lundgren, J. Richard) Solvability of factorizable groups. II. **80j:20023b**

Förster, Peter Charakterisierungen einiger Schunckklassen endlicher auflösbarer Gruppen. I. **80h:20031a**
Charakterisierungen einiger Schunckklassen endlicher auflösbarer Gruppen. II. **80h:20031b**
Closure operations for Schunck classes and formations of finite solvable groups. **80c:20021**

Gilotti, Anna Luisa (*with* Serena, Luigi) p-injectors and finite supersoluble groups. (Italian summary) **80e:20026**

Goiko, V. I. Construction of $\mathfrak{F}$-pre-Frattini subgroups in arbitrary finite groups. (Russian. English summary) **80a:20025**
Maximal local subformations of some formations. (Russian. English summary) **80i:20007**

Hauck, Peter Endliche auflösbare Gruppen mit normalem $\mathfrak{F}$-Injektor. II. **80e:20027**
Eine Bemerkung zur kleinsten normalen Fittingklasse. **80h:20032**
Fittingklassen und Kranzprodukte. **80j:20024**

Kazarin, L. S. Some criteria for the nonsimplicity and solvability of finite factorizable groups. (Russian) **80m:20017**

(Koroĭev, A. G.) *See* **Robinson, D., 80b:20024**

Kramer, Otto-Uwe Gruppenklassen, deren kritische Gruppen minimal nicht nilpotent sind. (English summary) **80b:20022**

Kuleĭov, N. I. Completely π-factorizable groups. (Russian) **80a:20026**
Finite π-solvable groups with π-maximal sensitive subgroups. (Russian) **80d:20021**

Lafuente, J. On normal Schunck classes. The derived classes. (Spanish. English summary) **80g:20032**

Losey, Gerald (*with* Stonehewer, S. E.) Local conjugacy in finite soluble groups. **80i:20008**

Lundgren, J. Richard *See* **Finkel, David, 80j:20023a** *and* **Finkel, David, 80j:20023b**

McClendon, J. F. Classifying subgroups of solvable groups. **80c:20022**

(Merzljakov, Ju. I.) *See* **Robinson, D., 80b:20024**

Možarovskaja, L. S. Finite supersolvable groups with c-complemented subgroups. (Russian) **80f:20017**

Parker, Donald B. Injectors which are T.I. subgroups. **80b:20023a**

Peng, T. A. A note on p-nilpotent groups. **80c:20023**

Robinson, D. A new treatment of soluble groups with finiteness conditions on their abelian subgroups. (Russian) **80b:20024**

Rowley, Peter On factorizable groups. **80f:20018**
Solubility of finite groups admitting a fixed-point-free abelian automorphism group of square-free exponent rs. **80c:20024**

Scarselli, Alessandro On a class of inseparable finite groups. **80h:20033**

Sehgal, Surinder Projectors which are T.I. subgroups. **80b:20023b**

Sementovskiĭ, V. G. Classes of conjugate abnormal $\mathfrak{F}$-projectors of Σ-solvable groups. I. (Russian. English summary) **80g:20033a**
Classes of conjugate abnormal $\mathfrak{F}$-projectors of Σ-solvable groups. II. Dispersive π-decomposable projectors of π-solvable groups. (Russian. English summary) **80g:20033b**

Serena, Luigi *See* **Gilotti, Anna Luisa, 80e:20026**

Skiba, A. N. A criterion for membership of a finite group in a local formation. (Russian) **80a:20027**
Formations that are generated by finite groups. (Russian. English summary) **80d:20022**
Local formations of finite groups with S_n-closed subformations. (Russian. English summary) **80m:20018**

Stonehewer, S. E. *See* **Losey, Gerald, 80i:20008**

Sysak, Ja. P. Groups with complemented abelian subgroups of type (p, p). (Russian) **80h:20034**

Taketa, Kiyosi Über die Struktur der auflösbaren Gruppen, als die der mehrstufigen metabelschen Gruppen. **80a:20028a**
Errata: "Über die Struktur der auflösbaren Gruppen, als die der mehrstufigen metabelschen Gruppen" (Proc. Fac. Sci. Tokai Univ. 13 (1978), 19–38). **80a:20028b**

Verardi, Libero Groups which are the product of two solvable subgroups. (Italian. English summary) **80f:20019**

Vorob'ev, N. T. Maximal screens of generated formations. (Russian. English summary) **80e:20028**

van der Waall, Robert W. On the structure of the minimal non-M-groups. **80c:20025**

Walls, Gary *See* **Berthold, Dennis, 80b:20021**

Wright, C. R. B. On splitting in finite groups. **80a:20029**

Yoshida, Tomoyuki On the Hall-Higman and Shult theorems. **80c:20026**

Secondary classifications:

Álvarez Dotú, A. Products of Fitting classes. Injectors in π-solvable groups. (Spanish. English summary) **(80e:20032)**

Camina, Alan R. Some conditions which almost characterize Frobenius groups. **(80a:20011)**

Chang, Shui Chi On groups admitting a fixed-point-free automorphism. **(80a:20030)**

Charnes, C. Some results concerning Fitting classes defined by parity. **(80h:20042)**

Kazarin, L. S. The product of two close-to-nilpotent groups. (Russian) **(80k:20020)**

Kuzennĭ, M. F. On nondispersive groups. (Russian) **(80c:20055)**

Martínez Verdsch, J. R. (*with* Torres Iglesias, M.) Existence and conjugation of certain injectors in finite π-solvable groups. (Spanish) **(80e:20033)**

Možarovskaja, L. S. Some properties of finite supersolvable groups. (Russian) **(80g:20047)**

Nishida, Goro On a characterization of finite groups of p-rank 1. **(80a:55014)**

Semenčuk, V. N. Finite groups with given properties of subgroups. (Russian. English summary) **(80d:20039)**

Taketa, Kiyosi Über die monomialen Gruppen. VII. Über die Gruppen, deren Darstellungen sich sämtlich auf monomiale Gestalt transformieren lassen. **(80g:20011)**

Torres Iglesias, M. *See* **Martínez Verdsch, J. R., (80e:20033)**

Weiss, Richard M. Symmetrische Graphen mit auflösbaren Stabilisatoren. **(80a:05114)**

20D15 Nilpotent groups, p-groups

Barišovec', P. P. Finite nonabelian p-groups with complemented nonabelian subgroups. (Russian) **80h:20035**
Finite groups with complemented nonmetacyclic subgroups. (Russian) **80b:20025**

Beisiegel, Bert Finite p-groups with nontrivial p'-automorphisms. **80b:20026**

Černikov, M. S. (*with* Petravčuk, A. P.) A complementarity condition. (Russian) **80h:20036**

Leong, Y. K. Finite 2-groups of class two with cyclic centre. **80a:20037**

Miller, Jay I. Just non-metabelian groups. **80b:20027**

Müller, Ottmar On p-automorphisms of finite p-groups. **80k:20019**

Petravčuk, A. P. *See* **Černikov, M. S., 80h:20036**

Rouse, Christian On centralizers of involutions in 2-groups. **80i:20009**

Sherman, Gary A lower bound for the number of conjugacy classes in a finite nilpotent group. **80h:20038**

Teschke, Lothar Über die Normalteiler der p-Sylowgruppe der symmetrischen Gruppe vom Grade p^m. **80e:20029**

Timmesfeld, Franz A note on 2-groups of $GF(2^n)$-type. **80f:20020**

Tisch, Thomas 2-Gruppen mit kleinen selbstzentralisierenden Untergruppen. **80f:20021**

Vasil'ev, V. G. Derived length of uniform products of cyclic groups. (Russian) **80g:20034**

Secondary classifications:

Beisiegel, Bert Automorphisms and ultraspecial groups. **(80c:20029)**

Kazarin, L. S. The product of two close-to-nilpotent groups. (Russian) **(80k:20020)**

Losey, Gerald (*with* Losey, Nora) Augmentation quotients of some nonabelian finite groups. **(80d:20008)**

Losey, Nora *See* **Losey, Gerald, (80d:20008)**

20D20 Sylow subgroups, Sylow properties, π-groups, π-structure

Brauer, Richard Dagobert On finite groups with cyclic Sylow subgroups. II. **80m:20019**

Doktorov, I. P. Finite groups with complemented normalizers of Sylow subgroups. (Russian) **80b:20028**

Enguehard, Michel (*with* Puig, Lluis) Un critère d'existence de $[p, q]$-complément normal. **80f:20022**

Ferguson, Pamela A. On a problem of Frobenius. **80m:20020**
On a problem of Frobenius. II. **80m:20021**

Hansen, Rodney T. *See* **Swanson, Leonard G., 80b:20040**

Kabanov, V. V. Intersections of Sylow 2-subgroups in finite groups. (Russian) **80b:20029**

Kondo, Takeshi On Alperin-Goldschmidt's fusion theorem. **80g:20035**

Kondrat'ev, A. S. Some remarks on finite groups with a decomposable Sylow 2-subgroup. (Russian) **80j:20025**

Pescock, R. M. Groups with a cyclic Sylow subgroup. **80h:20039**

Puig, Lluis *See* **Enguehard, Michel, 80f:20022**

Rowley, Peter A note on strongly closed 2-subgroups of finite groups. **80e:20030**
Schiefelbusch, Lary Transfer and weakly closed subgroups. **80e:20031**
Smith, Stephen D. Even automizers and conjugacy of involutions. **80g:20036**
Swanson, Leonard G. (*with* Hansen, Rodney T.) Number-theoretic characterization of the subgroups and factor groups of a finite cyclic group. **80h:20040**

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Álvarez Dotú, A. A local definition of Fitting classes. (Spanish) **(80j:20021)**
Ferguson, Pamela A. On bounded simple groups of type $(2, (n))$. **(80j:20018)**
(*with* Smith, Stephen D.) Strongly self-centralizing Sylow 3-groups. **(80f:20014)**
Kniehov, N. I. Completely π-factorizable groups. (Russian) **(80a:20026)**
Monakhov, V. S. Orders of Sylow subgroups of the general linear group. (Russian) **(80c:20064)**
Peng, T. A. A note on p-nilpotent groups. **(80c:20023)**
Smith, Stephen D. *See* **Ferguson, Pamela A., (80f:20014)**
Venzke, Paul A contribution to the theory of finite supersolvable groups. **(80k:20050)**

20D25 Special subgroups (Frattini, Fitting, etc.)

Álvarez Dotú, A. Products of Fitting classes. Injectors in π-solvable groups. (Spanish. English summary) **80e:20032**
Blessenohl, Dieter (*with* Laue, Hartmut) Fittingklassen endlicher Gruppen, in denen gewisse Hauptfaktoren einfach sind. **80h:20041**
Charnes, C. Some results concerning Fitting classes defined by parity. **80h:20042**
Harada, Koichiro Finite groups having 2-local subgroups $E_{16}{\cdot}L_4(2)$. **80b:20030**
Laue, Hartmut *See* **Blessenohl, Dieter, 80h:20041**
Martínez Verduch, J. R. (*with* Torres Iglesias, M.) Existence and conjugation of certain injectors in finite π-solvable groups. (Spanish) **80e:20033**
Pogrebinskiĭ, B. M. Finite groups in which all maximal subgroups with nonidentity cores are Frobenius groups. (Russian. Georgian and English summaries) **80j:20026**
Poljakov, L. Ja. Maximal subgroups of finite groups. (Russian) **80c:20027**
Romanovskiĭ, A. V. Finite groups with a Frobenius subgroup. (Russian) **80m:20022**
Torres Iglesias, M. *See* **Martínez Verduch, J. R., 80e:20033**

Secondary classifications:

Solomon, Ronald (*with* Timmesfeld, Franz) A note on tightly embedded subgroups. **(80b:20017)**
Timmesfeld, Franz *See* **Solomon, Ronald, (80b:20017)**

20D30 Series and lattices of subgroups

Wiegold, James Growth sequences of finite groups. III. **80c:20028**

Secondary classifications:

Holland, W. Charles (*with* Martinez, Jorge) Accessibility of torsion classes. **(80g:06021)**
Martinez, Jorge *See* **Holland, W. Charles, (80g:06021)**

20D35 Subnormal subgroups

Ho, C. Y. Conjugation of two finite subnormal subgroups. **80d:20023**

Secondary classifications:

Kawamoto, Naoki Subideality and ascendancy in generalized solvable Lie algebras. **(80k:17005)**

20D40 Products of subgroups

Finkel, David On the solvability of certain factorizable groups. II. **80e:20034**
Kazarin, L. S. The product of two close-to-nilpotent groups. (Russian) **80k:20020**
Preiser, Udo Produkte von endlichen einfachen Gruppen. **80b:20031**
Produkte endlicher einfacher Gruppen. **80k:20021**
Syskin, S. A. A problem of R. Baer. (Russian) **80j:20027**

20D45 Automorphisms

Beisiegel, Bert Automorphisms and ultraspecial groups. **80c:20029**
Berkovič, Ja. G. Automorphisms of semidirect products with a characteristic commutative nucleus. (Russian) **80c:20030**
Chang, Shui Chi On groups admitting a fixed-point-free automorphism. **80a:20030**
Fukushima, Hiroshi Finite groups admitting an automorphism of prime order. I. **80j:20028**
Gagen, Terence M. (*with* Robinson, Derek J. S.) Finite metabelian groups with no outer automorphisms. **80j:20029**
Griess, Robert L., Jr. Finite groups whose involutions lie in the center. **80c:20031**
Huhro, E. I. Verbal commutativity and fixed points of p-automorphisms on finite p-groups. (Russian) **80m:20023**
Muraz, M. M. FC-solvable groups of automorphisms with finiteness condition for the abelian normal subgroups of Mal'cev solvable groups. (Russian) **80c:20032**
Rickman, Benjamin Groups which admit a fixed-point-free automorphism of order p^2. **80j:20030**
Robinson, Derek J. S. *See* **Gagen, Terence M., 80j:20029**
Stölting, Rolf Die Kleinsche Vierergruppe als fixpunktfreie Automorphismengruppe. **80f:20023**
Virág, I. A note on a theorem of Frobenius. **80g:20037**

Secondary classifications:

Harada, Koichiro The automorphism group and the Schur multiplier of the simple group of order $2^{14}{\cdot}3^6{\cdot}5^6{\cdot}7{\cdot}11{\cdot}19$. **(80c:20016)**
On Yoshida's transfer. **(80c:20017)**
Kanetkar, Sharad V. *See* **Kekre, Hemachandra B.; et al., (80g:94013)**
Kekre, Hemachandra B. (*with* Wagh, Meghanad D.; Kanetkar, Sharad V.) On group theoretic transforms and the automorphism groups. **(80g:94013)**
Müller, Ottmar On p-automorphisms of finite p-groups. **(80k:20019)**
Rowley, Peter Solubility of finite groups admitting a fixed-point-free abelian automorphism group of square-free exponent rs. **(80c:20024)**
Wagh, Meghanad D. *See* **Kekre, Hemachandra B.; et al., (80g:94013)**

20D50 Covering of subgroups

Sims, Charles C. A method for constructing a group from a subgroup. **80c:20033**

20D60 Arithmetic and combinatorial problems

Babai, László On a conjecture of M. E. Watkins on graphical regular representations of finite groups. **80a:20031**
Delsarte, Philippe A generalization of the Legendre symbol for finite abelian groups. **80f:20024**
Fenchel, Käte On a theorem of Frobenius. **80f:20025**
Laffey, Thomas J. The number of solutions of $x^4 = 1$ in finite groups. **80g:20038**
Veĭchlit, A. I. (*with* Žmud', È. M.) Connectedness of a finite group and Zassenhaus groups. (Russian. Georgian and English summaries) **80c:20034**
Žmud', È. M. *See* **Veĭchlit, A. I., 80c:20034**

20D99 None of the above, but in this section

Bender, Helmut On the normal p-structure of a finite group and related topics. I. **80a:20032**
Brandis, Albrecht Verschränkte Homomorphismen endlicher Gruppen. **80b:20032**
Zur Verlagerungstheorie endlicher Gruppen. **80e:20035**
Laska, Michael A characterization of SL(2, 3) in terms of characters. **80b:20033**
Maxson, Carlton J. (*with* Smith, Kirby C.) The centralizer of a group endomorphism. **80j:20031**
Mullineux, G. Centralizers of 3-cycles in alternating groups. **80f:20026**
Nomura, Kazumasa Inner subgroups of finite groups. **80a:20033**
Rusin, David J. What is the probability that two elements of a finite group commute? **80m:20024**
Smith, Kirby C. *See* **Maxson, Carlton J., 80j:20031**
Strickland, Elisabetta On a longstanding conjecture of G. A. Miller. (Italian summary) **80j:20032**
Sun, H. S. On groups generated by the squares. **80i:20010**
Wester, Michael Eine Kennzeichnung einiger einfacher Gruppen vom Charakteristik 2-Typ. **80c:20035**

Secondary classifications:

Friedlander, Richard J. (*with* Gordon, Basil; Miller, Michael D.) On a group sequencing problem of Ringel. **(80c:05079)**
Gordon, Basil *See* **Friedlander, Richard J.; et al., (80c:05079)**
Miller, Michael D. *See* **Friedlander, Richard J.; et al., (80c:05079)**
Morton, Patrick A generalization of Zolotarev's theorem. **(80d:10005)**
Rose, Bruce I. The $\aleph_1$-categoricity of strictly upper triangular matrix rings over algebraically closed fields. **(80d:03031)**

20Exx Structure and classification of infinite or finite groups

(Černikov, S. M.) *See* **Structure of groups and properties of their subgroups, 80d:20024**
Groups *See* **Structure of groups and properties of their subgroups, 80d:20024**
Structure of groups and properties of their subgroups ★Строение групп и свойства их подгрупп. (Russian) [Structure of groups and properties of their subgroups] **80d:20024**

20E05 Free nonabelian groups

Djoković, Dragomir Ž. Finite number of double cosets in a free product with amalgamation. **80e:20036**
Edmunds, Charles C. On the endomorphism problem for free groups. II. **80d:20025**
Gaglione, Anthony M. A commutator identity proved by means of the Magnus algebra. **80k:20022**
Krasaĭkov, A. F. Generating elements of the group $F/[N, N]$. (Russian) **80c:20036**
Rosenberger, Gerhard Produkte von Potenzen und Kommutatoren in freien Gruppen. **80a:20034**
Alternierende Produkte in freien Gruppen. **80d:20026**

Secondary classifications:

Lue, Abraham S.-T. The centre of the outer automorphism group of a free group. **(80c:20048)**

20E06 Free products, free products with amalgamation, Higman-Neumann-Neumann extensions, and generalizations

Chiswell, I. M. Embedding theorems for groups with an integer-valued length function. **80h:20043**
Šmel'kin, A. L. Some factor groups of a free product. (Russian) **80m:20025**
Stothers, W. W. Free subgroups of the free product of cyclic groups. **80c:20037**

Secondary classifications:

Gupta, Chander Kanta Subgroups of free groups induced by certain products of augmentation ideals. **(80h:20013)**

20E07 Subgroup theorems

Černikov, M. S. The complementarity of the commutators of infinite subgroups of infinite groups. (Russian) **80k:20023**
Chien, Ts'an Lung A remark on finite groups. **80c:20038**
Gorman, T. D. Existence of normal subgroups in finite groups. (Russian. English summary) **80j:20033**
Menegazzo, Federico Normal subgroups and projectivities of finite groups. **80i:20011**
Previato, Emma Errata: "Groups in which the Dedekind relation is transitive" (Rend. Sem. Mat. Univ. Padova 54 (1975), 215–229 (1976)). (Italian) **80a:20035**
Saluk, M. I. Finite groups with normalizer properties of their subgroups. (Russian) **80c:20042**
Schützenberger, Marcel Paul Sur les sous-groupes de rang fini d'un groupe libre. (English summary) **80m:20026**
Wilson, John S. Groups with many characteristically simple subgroups. **80k:20024**

20E10 Varieties of groups

Analin, V. S. Mixed identities in groups. (Russian) **80c:20039**
Artamonov, V. A. Chain varieties of groups. (Russian) **80m:20027**
Bryant, Roger M. (*with* Groves, J. R. J.) Wreath products and ultraproducts of groups. **80d:20027**
Cates, Marshall L. A note on varieties generated by metabelian wreath products. **80c:20037**
Grinbergs, A. (*with* Krop, L. E.) Homogeneous verbal ideals. (Russian) **80g:20039**
4-stable varieties. (Russian) **80g:20040**
Groves, J. R. J. Erratum: "Extended Fitting series in varieties of soluble groups" [J. Algebra 39 (1976), no. 1, 208–217; MR 53 #5748]. **80k:20025**
See also **Bryant, Roger M., 80d:20027**
Kovács, L. G. Varieties of nilpotent groups of small class. **80g:20041**
Krop, L. E. *See* **Grinbergs, A., 80g:20039**
Vovsi, S. M. Prevarieties of generalized stable groups. (Russian) **80c:20040**

Secondary classifications:

Adjan, S. I. The simplicity of periodic products of groups. (Russian) **(80c:20044)**
Grinbergs, A. Unification of varieties of pairs. (Russian) **(80g:08014)**
Kleiman, Ju. G. Verbal ideals of a Cartesian product. (Russian) **(80c:20051)**
Kuikuiejs, A. Identities of finite-dimensional representations. (Russian) **(80i:20019)**
Plotkin, B. I. Remarks on small varieties of representations of groups. (Russian) **(80m:20012)**

20E15 Chains and lattices of subgroups, subnormal subgroups [See also 20F22.]

Ambrosiewicz, Elżbieta On the property W for modular groups. **80c:20041**
Baranik, A. F. Groups that are close to the Hamiltonian groups. (Russian) **80b:20034**
Franchetta, Anna Groups whose lattice of subnormal subgroups has a dual. (Italian) **80g:20042**
Groves, J. R. J. Soluble groups with every proper quotient polycyclic. **80b:20035**
Grunewald, Fritz J. (*with* Pickel, P. F.; Segal, Daniel) Finiteness theorems for polycyclic groups. **80k:20026**
Hirshon, Ronald Descending chains in free products. **80b:20036**
Huq, Syed A. Seminilpotent groups. **80e:20038**
Miller, Jay I. Center-by-metabelian groups of prime exponent. **80c:20042**
Pekelis, A. S. Lattice characterization of the locally nilpotent radical in a group. (Russian) **80k:20027**
Phillips, Veril L. Infinite groups with a subnormality condition on infinite subgroups. **80f:20027**
Pickel, P. F. *See* **Grunewald, Fritz J.; et al., 80k:20026**
Previato, Emma Groups in whose dual lattice the Dedekind relation is transitive. (Italian) **80f:20028**
Pride, Stephen J. On groups of finite height. **80m:20028**
Protasov, I. V. On the lattice of subgroups of a profinite group. (Russian. English summary) **80f:20029**
Segal, Daniel *See* **Grunewald, Fritz J.; et al., 80k:20026**
Zacher, Giovanni The lattice of subgroups of the symmetric group. (Italian. English summary) **80c:20043**

20E18 Limits, profinite groups

Hartley, Brian Subgroups of finite index in profinite groups. **80k:20028**
Hutchinson, M. F. Tall profinite groups. **80h:20044**
Mel'nikov, O. V. Characterization of accessible subgroups of free profinite groups. (Russian. English summary) **80m:20029**
Normal divisors of free profinite groups. (Russian) **80d:20028**
Oltikar, B. C. (*with* Ribes, Luis) On prosupersolvable groups. **80e:20039**
(*with* Ribes, Luis) On the Frattini subgroup of free products of profinite groups. **80b:20037**
Ribes, Luis *See* **Oltikar, B. C., 80b:20037** *and* **Oltikar, B. C., 80e:20039**

Secondary classifications:

Elliott, George A. A property of totally ordered abelian groups. **(80c:06023)**
Jeanes, Susan C. (*with* Wilson, John S.) On finitely generated groups with many profinite-closed subgroups. **(80b:20038)**
Protasov, I. V. On the lattice of subgroups of a profinite group. (Russian. English summary) **(80f:20029)**
Schneebeli, Hans Rudolf Group extensions whose profinite completion is exact. **(80c:20047)**
Wilson, John S. *See* **Jeanes, Susan C., (80b:20038)**

20E22 Extensions, wreath products, and other compositions

Adjan, S. I. Periodic products of groups. (Russian) **80m:20030**
The simplicity of periodic products of groups. (Russian) **80c:20044**
Dempwolff, Ulrich On extensions of elementary abelian 2-groups by Σ_n. (Serbo-Croatian summary) **80k:20029**
Genov, Georgi K. Some examples of exact operations on the class of all groups. (Russian. English summary) **80m:20031**
Gow, Roderick Representations and automorphisms of some wreath products. **80d:20029**
Hassanabadi, Aliakbar Mohammadi The subgroups of the group of automorphisms of permutational wreath products. **80c:20045**
Holt, D. F. Embeddings of group extensions into wreath products. **80c:20046**
Meldrum, J. D. P. Centralisers in wreath products. **80i:20012**
Mohammadi Hassanabadi, A. Automorphisms of permutational wreath products. **80b:20049**
Schneebeli, Hans Rudolf Group extensions whose profinite completion is exact. **80c:20047**
Seksenbaev, K. S. The lower central order of a wreath product of finite abelian groups. (Russian) **80c:20048**
Thomson, Michael W. Representations of certain verbal wreath products by matrices. **80g:20043**

Secondary classifications:

Bryant, Roger M. (*with* Groves, J. R. J.) Wreath products and ultraproducts of groups. **(80d:20027)**
Cates, Marshall L. A note on varieties generated by metabelian wreath products. **(80c:20037)**
Groves, J. R. J. *See* **Bryant, Roger M., (80d:20027)**
Hoffman, Peter Products of representations of wreath products. **(80j:20015)**
Krop, L. E. Residual finite stability of mixed wreath products. (Russian) **(80h:20056)**

20E25 Local properties

Asar, A. O. On the structure of locally finite groups with Min-2. **80d:20030**
Bryant, Roger M. (*with* Wilson, John S.) On locally finite CZ-groups. **80k:20030**
Higgins, C. A. Some structure theorems for CZ-groups. **80k:20031**
Jeanes, Susan C. (*with* Wilson, John S.) On finitely generated groups with many profinite-closed subgroups. **80b:20038**
Kuz'min, Ju. V. Some approximation properties of the variety $\mathfrak{U}\mathfrak{N}_c$. (Russian) **80b:20039**
Rae, A. (*with* Syed, Z. H.) Sylow subgroups in a pair of locally finite groups. **80b:20040**
Šafiro, A. A. (*with* Šunkov, V. P.) A characterization of an infinite Černikov group, which is not a finite extension of a quasicyclic group. (Russian) **80b:20041**
Šunkov, V. P. *See* **Šafiro, A. A., 80b:20041**
Syed, Z. H. *See* **Rae, A., 80b:20040**
Wilson, John S. *See* **Jeanes, Susan C., 80b:20038** *and* **Bryant, Roger M., 80k:20030**
Žuk, I. K. A note on the finite approximability of free products with an amalgamated subgroup. (Russian. English summary) **80j:20034**

Secondary classifications:

Hartley, Brian Finite groups of automorphisms of locally soluble groups. **(80e:20047)**
Schiefelbusch, Lary Transfer and weakly closed subgroups. **(80e:20031)**

20E26 Residual properties and generalizations

Allenby, R. B. J. T. (*with* Moser, L. E.; Tang, C. Y.) The residual finiteness of certain one-relator groups. **80k:20032**
(Macdonald, I. D.) *See* **Neumann, B. H., 80c:20049**
Moser, L. E. *See* **Allenby, R. B. J. T.; et al., 80k:20032**
Neumann, B. H. A problem of I. D. Macdonald: "Factor groups" (Math. Gaz. 62 (1978), no. 419, 29–35). **80c:20049**
Tang, C. Y. *See* **Allenby, R. B. J. T.; et al., 80k:20032**

Secondary classifications:

Kleiman, Ju. G. Verbal ideals of a Cartesian product. (Russian) **(80c:20051)**

20E28 Maximal subgroups, minimal subgroups

20E32 Simple groups [See also 20D05.]

Ol'šanskiĭ, A. Ju. Infinite groups with cyclic subgroups. (Russian) **80i:20013**
Sozutov, A. I. Groups with Frobenius pairs of conjugate elements. (Russian) **80d:20031**

20E34 General structure theorems

Černikov, M. S. Nonperiodic ω A-factorizable groups. (Russian) **80f:20030**
Groups in which every abelian subgroup that does not coincide with its normalizer is invariant. (Russian) **80f:20031**
Groups with complemented commutants of proper subgroups. (Russian) **80c:20050**
Fine, Benjamin (*with* Tretkoff, Marvin) On the SQ-universality of HNN groups. **80d:20032**

Goreckiĭ, V. È. Groups with a dense system of infinite invariant abelian subgroups. (Russian) **80f:20032**
Grunewald, Fritz J. On some groups which cannot be finitely presented. **80d:20033**
(*with* Havas, George; Mennicke, J. L.; Newman, M. F.) Groups of exponent eight. **80g:20044**
Havas, George *See* **Grunewald, Fritz J.; et al., 80g:20044**
Mazet, Pierre Sur le multiplicateur de Schur du groupe de Mathieu M_{22}. (English summary) **80m:20032**
Mennicke, J. L. *See* **Grunewald, Fritz J.; et al., 80g:20044**
Newman, M. F. *See* **Grunewald, Fritz J.; et al., 80g:20044**
Piccard, Sophie Une proposition fondamentale concernant les groupes de transformations périodiques, de période entière, de l'ensemble Z des entiers rationnels. **80c:20048**
Tretkoff, Marvin *See* **Fine, Benjamin, 80d:20032**
Walls, Gary Trivial intersection groups. **80e:20040**
Zaicev, D. I. Groups with complemented infinite abelian normal subgroups. (Russian) **80f:20033**

Secondary classifications:

Arad, Zvi (*with* Chillag, David) Finite groups with conditions on the centralizers of π-elements. **(80j:20022)**
Brunner, Andrew Michael Metabelian representations and the isomorphism problem. **(80f:20034)**
Chillag, David *See* **Arad, Zvi, (80j:20022)**

20E36 General theorems concerning automorphisms of groups

Bachmuth, Seymour (*with* Mochizuki, Horace Y.) IA-automorphisms of the free metabelian group of rank 3. **80a:20036**
Buckley, Joseph (*with* Wiegold, James) On the number of outer automorphisms of an infinite nilpotent p-group. **80k:20033**
Burlak, Ja. A. Automorphisms of the one-dimensional general affine group over a division ring. (Russian) **80e:20041**
Mochizuki, Horace Y. *See* **Bachmuth, Seymour, 80a:20036**
Wiegold, James *See* **Buckley, Joseph, 80k:20033**

Secondary classifications:

Fournelle, Thomas A. Elementary abelian p-groups as automorphism groups of infinite groups. I. **(80j:20038)**
O'Meara, O. T. ★Symplectic groups. **(80a:20045)**

20E99 None of the above, but in this section

Balogun, Bola O. Conjugate purity and infinite groups. **80m:20033**
Bass, Hyman Growth of finitely generated groups. **80d:20034**
Gramberg, Edelgard (*with* Zieschang, Heiner) Order reduced Reidemeister-Schreier subgroup presentations and applications. **80k:20034**
Kumar, Kiran On structure of groups. I, II. **80h:20045**
Nagao, Hirosi A remark on simple symmetric sets. **80g:20045**
Strebel, Ralph A note on groups with torsion-free abelianization and trivial multiplicator. **80j:20035**
Zieschang, Heiner *See* **Gramberg, Edelgard, 80k:20034**

Secondary classifications:

Baur, Walter (*with* Cherlin, Gregory; Macintyre, Angus) Totally categorical groups and rings. **(80e:03034)**
Cherlin, Gregory *See* **Baur, Walter; et al., (80e:03034)**
Dunwoody, M. J. Accessibility and groups of cohomological dimension one. **(80i:20024)**
Macintyre, Angus *See* **Baur, Walter; et al., (80e:03034)**

20Fxx Special aspects of infinite or finite groups

Petrich, Mario The ladder relation in groups, rings, lattices, and semigroups. **80k:20035**

20F05 Generators, relations, and presentations

Adjan, S. I. ★The Burnside problem and identities in groups. **80d:20035**
Assion, Joachim Einige endliche Faktorgruppen der Zopfgruppen. **80k:20036**
Baumslag, Benjamin (*with* Pride, Stephen J.) Groups with one more generator than relators. **80i:20014**
de Bruijn, N. G. A note on the Cauchy-Frobenius lemma. **80i:20015**
Brunner, Andrew Michael Metabelian representations and the isomorphism problem. **80f:20034**
Campbell, C. M. (*with* Robertson, E. F.) Deficiency zero groups involving Fibonacci and Lucas numbers. **80b:20042**
Collins, Donald J. Presentations of the amalgamated free product of two infinite cycles. **80b:20046**
Craggs, R. On finite presentations for groups. **80m:20034**
Groves, J. R. J. Soluble groups in which every finitely generated subgroup is finitely presented. **80a:20037**
Johnson, David L. A new class of 3-generator finite groups of deficiency zero. **80d:20036**
Kleĭman, Ju. G. Verbal ideals of a Cartesian product. (Russian) **80c:20051**
(Lennox, John C.) *See* **Adjan, S. I., 80d:20035**
Pride, Stephen J. *See* **Baumslag, Benjamin, 80i:20014**
Robertson, E. F. *See* **Campbell, C. M., 80b:20042**
Rosenberger, Gerhard Über alternierende Wörter in freien Produkten mit Amalgam. **80h:20047**
Sidki, Said Generators and relations of finite groups. **80j:20036**
Strebel, Ralph On finitely related soluble groups. **80k:20037**
Tetruašvili, M. R. A theorem of Howson. (Russian. Georgian and English summaries) **80i:20016**
Wiegold, James (*with* Wilson, John S.) Growth sequences of finitely generated groups. **80k:20038**
See also **Adjan, S. I., 80d:20035**
Wilson, John S. *See* **Wiegold, James, 80k:20038**

Secondary classifications:

Allenby, R. B. J. T. (*with* Moser, L. E.; Tang, C. Y.) The residual finiteness of certain one-relator groups. **(80k:20032)**
Craig, William Lane A presentation of the symmetric group based on unique irredundant nondecreasing factorization. **(80a:20002)**
Ferri, Massimo A non-Cayleyian diagram for presentations of groups. **(80i:05045)**
Gupta, Narain D. (*with* Laffey, Thomas J.; Thomson, Michael W.) On the higher relation modules of a finite group. **(80h:20012)**
Laffey, Thomas J. *See* **Gupta, Narain D.; et al., (80h:20012)**
McKay, John (*with* Young, Kiang Chuen) The nonabelian simple groups G, $|G| < 10^6$—minimal generating pairs. **(80d:20018)**
Moser, L. E. *See* **Allenby, R. B. J. T.; et al., (80k:20032)**
Rosenberger, Gerhard Alternierende Produkte in freien Gruppen. **(80d:20026)**
Tang, C. Y. *See* **Allenby, R. B. J. T.; et al., (80k:20032)**
Thomson, Michael W. *See* **Gupta, Narain D.; et al., (80h:20012)**
Young, Kiang Chuen *See* **McKay, John, (80d:20018)**

20F06 Cancellation theory

Comerford, Leo P., Jr. Subgroups of small cancellation groups. **80a:20038**
Dô Long Vân On identity and conjugacy problems for certain classes of finitely presented groups. (Russian) **80g:20046**
Klassen, V. P. The structure of subgroups satisfying an identity in groups with a small measure of overlap of defining relators. (Russian) **80f:20035**
Perraud, Jean Sur les conditions de petite simplification qui permettent d'utiliser l'algorithme de Dehn. **80b:20043**
Vella, Alfred D. The malnormality of certain subgroups of small cancellation groups. **80c:20052**

Secondary classifications:

Chiswell, I. M. Embedding theorems for groups with an integer-valued length function. **(80h:20043)**
Rosenberger, Gerhard Über alternierende Wörter in freien Produkten mit Amalgam. **(80h:20047)**
Alternierende Produkte in freien Gruppen. **(80d:20026)**

20F10 Word problems, other decision problems, connections with logic and automata [See also 03D05, 03D40, 06B25, 08A50, 68Dxx, 68F10.]

Britton, J. L. On the conjugacy problem and difference equations. **80k:20039**
Edmunds, Charles C. A condition equivalent to the solvability of the endomorphism problem for free groups. **80f:20036**
Gol'berg, A. I. The impossibility of strengthening certain results of Greendlinger and Lyndon. (Russian) **80d:20037**
Kleĭman, Ju. G. Identities and some algorithmic problems in groups. (Russian) **80b:20044**
Makanin, G. S. Systems of standard equations in words of an n-layer alphabet with unknowns. (Russian) **80a:20039**
Roman'kov, V. A. Equations in free metabelian groups. (Russian) **80k:20040**
Tetruašvili, M. R. The problem of conjugacy for groups with one defining relation and the complexity of Turing computations. (Russian. Georgian and English summaries) **80d:20038**
Vanden Eynden, Charles Countable sequenceable groups. **80b:20045**

Secondary classifications:

Avenhaus, J. (*with* Madlener, K.) Subrekursive Komplexität bei Gruppen. II. Der Einbettungssatz von Higman für entscheidbare Gruppen. (English summary) **(80d:03044)**
(*with* Madlener, K.) Algorithmische Probleme bei Einrelatorgruppen und ihre Komplexität. **(80b:03055)**
Edmunds, Charles C. On the endomorphism problem for free groups. II. **(80d:20025)**
Madlener, K. *See* **Avenhaus, J., (80b:03055)** *and* **Avenhaus, J., (80d:03044)**
Perraud, Jean Sur les conditions de petite simplification qui permettent d'utiliser l'algorithme de Dehn. **(80b:20043)**
Roman'kov, V. A. Universal theory of nilpotent groups. (Russian) **(80j:03058)**
Stillwell, John C. Unsolvability of the knot problem for surface complexes. **(80j:03060)**

20F12 Commutator calculus

Cassidy, Phyllis Joan Products of commutators are not always commutators: an example. **80h:20048**
Kappe, Luise-Charlotte Groups with a cyclic term in the lower central series. **80c:20053**
Skopin, A. I. Transmetabelian groups. (Russian) **80j:20037**

Secondary classifications:

Goldstein, Richard Z. (*with* Turner, Edward C.) Applications of topological graph theory to group theory. **(80g:20050)**
Hartley, Brian Subgroups of finite index in profinite groups. **(80k:20028)**
Turner, Edward C. *See* **Goldstein, Richard Z., (80g:20050)**

20F14 Derived series, central series, and generalizations

Hurley, T. C. Intersections of terms of polycentral series of free groups and free Lie algebras. **80m:20035**
Isbell, John R. Zassenhaus' theorem supersedes the Jordan-Hölder theorem. **80c:20054**
Lue, Reinhard Stability groups and central series. **80b:20046**
Otal Cinca, Javier Centrality with respect to a class of groups and generalized associated classes. (Spanish. English summary) **80h:20049**
Wilson, John S. Locally nilpotent CZ-groups are hypercentral. **80b:20047**

Secondary classifications:

Losey, Gerald (*with* Losey, Nora) Augmentation quotients of some nonabelian finite groups. (**80d:20008**)
Losey, Nora *See* **Losey, Gerald**, (**80d:20008**)
Wehrfritz, B. A. F. Hypercentral unipotent subgroups of linear groups. (**80b:20065**)

20F16 Solvable groups, supersolvable groups

Csörgő, P. On the theory of Frobenius groups. **80e:20043**
Možarovskaja, L. S. Some properties of finite supersolvable groups. (Russian) **80g:20047**
Segal, Daniel Two theorems of polycyclic groups. **80a:20040**
Semenčuk, V. N. Finite groups with given properties of subgroups. (Russian. English summary) **80d:20039**
Venzke, Paul A contribution to the theory of finite supersolvable groups. **80h:20050**

Secondary classifications:

Heppner, E. Über die Anzahl der natürlichen Zahlen n kleiner oder gleich x, für die jede Gruppe der Ordnung n auflösbar ist. (**80m:10035**)
Razmyslov, Ju. P. The Hall-Higman problem. (Russian) (**80d:20040**)
Strebel, Ralph On finitely related soluble groups. (**80k:20037**)
Wehrfritz, B. A. F. On the Lie-Kolchin-Mal'cev theorem. (**80c:20070**)

20F18 Nilpotent groups

Cassidy, Charles Le genre d'un groupe nilpotent avec opérateurs. **80e:20044**
Grunewald, Fritz J. (*with* Scharlau, Rudolf) A note on finitely generated torsion-free nilpotent groups of class 2. **80h:20051**
Menal, Pere Addendum to: "Residual linearity for certain nilpotent groups" (Proc. Amer. Math. Soc. **68** (1978), no. 1, 27–31). **80f:20037**
Scharlau, Rudolf *See* **Grunewald, Fritz J.**, **80h:20051**

Secondary classifications:

Hilton, Peter On orbit sets for group actions and localization. (**80c:55006**)
Roitberg, Joseph Free homotopy theory and localization. (**80g:55024**)
Roman'kov, V. A. Universal theory of nilpotent groups. (Russian) (**80j:03058**)
Saracino, Dan (*with* Wood, Carol) Periodic existentially closed nilpotent groups. (**80m:03071**)
Wood, Carol *See* **Saracino, Dan**, (**80m:03071**)

20F19 Generalizations of solvable and nilpotent groups

Kuzennyĭ, M. F. On nondispersive groups. (Russian) **80c:20055**

Secondary classifications:

Bryant, Roger M. (*with* Wilson, John S.) On locally finite CZ-groups. (**80k:20030**)
Hartley, Brian Finite groups of automorphisms of locally soluble groups. (**80e:20047**)
Otal Cinca, Javier Centrality with respect to a class of groups and generalized associated classes. (Spanish. English summary) (**80h:20049**)
Wilson, John S. *See* **Bryant, Roger M.**, (**80k:20030**)

20F22 Other classes of groups defined by subgroup chains

Lennox, John C. Joins of almost subnormal subgroups. **80h:20052**
Otal Cinca, Javier Relatively R-closed classes of groups. (Spanish. English summary) **80e:20045**

Secondary classifications:

Seksenbaev, K. S. The lower central order of a wreath product of finite abelian groups. (Russian) (**80c:20048**)

20F24 FC-groups and their generalizations

Černikov, M. S. *See* **Černikova, N. V.**, **80g:20048**
Černikova, N. V. (*with* Černikov, M. S.) On the question of locally completely factorizable groups. (Russian) **80g:20048**
Kurdačenko, L. A. Structure of FC-groups whose periodic part is imbedded in a direct product of finite groups. (Russian) **80e:20046**

Secondary classifications:

Otal Cinca, Javier Centrality with respect to a class of groups and generalized associated classes. (Spanish. English summary) (**80h:20049**)
Syak, Ja. P. Groups with complemented abelian subgroups of type (p, p). (Russian) (**80h:20034**)

20F26 Special subgroups

Takura, Ken-Ichi On dimension subgroups. (Japanese) **80b:20050**
Tomanov, G. M. The Frattini subgroup of algebraic groups. (Russian. English summary) **80h:20053**

Secondary classifications:

Otlkar, B. C. (*with* Ribes, Luis) On the Frattini subgroup of free products of profinite groups. (**80h:20037**)
Ribes, Luis *See* **Otlkar, B. C.**, (**80b:20037**)

20F28 Automorphism groups of groups [See also 20E36.]

Andreadakis, S. On the automorphism group of free products. **80f:20038**
Ekong, Samuel D. Some results on automorphisms of affine algebraic groups. **80b:20051**
Fournelle, Thomas A. Elementary abelian p-groups as automorphism groups of infinite groups. I. **80j:20038**
Gupta, Narain D. (*with* Stonehewer, S. E.) Outer automorphisms of finitely generated nilpotent groups. **80f:20039**
Hartley, Brian Finite groups of automorphisms of locally soluble groups. **80e:20047**
Johnson, Arnold A. The automorphisms of the orthogonal groups $\Omega_n(V)$, $n > 5$. **80h:20054**
Lue, Abraham S.-T. The centre of the outer automorphism group of a free group. **80e:20048**
Semicomplete crossed modules and holomorphs of groups. **80g:20049**
Rosenberger, Gerhard (*with* Tessun, Franz) Über vollständige Automorphismengruppen und Gleichungen in der Modulgruppe. **80e:20049**
Stonehewer, S. E. *See* **Gupta, Narain D.**, **80f:20039**
Tessun, Franz *See* **Rosenberger, Gerhard**, **80e:20049**

Secondary classifications:

Lue, Reinhard Stability groups and central series. (**80b:20046**)
O'Meara, O. T. ★Symplectic groups. (**80a:20045**)

20F29 Representations of groups as automorphism groups of algebraic systems

Gould, Matthew (*with* James, Helen H.) Automorphism groups retracting onto symmetric groups. **80h:20055**
James, Helen H. *See* **Gould, Matthew**, **80h:20055**
Krop, L. E. Residual finite stability of mixed wreath products. (Russian) **80b:20056**

20F32 Geometric group theory [See also 05C25, 20Exx, 20Gxx.]

Hoare, A. H. M. Coinitial graphs and Whitehead automorphisms. **80e:20050**
Müller, Heinz Groupes et paires de groupes à dualité de Poincaré de dimension 2. (English summary) **80l:20017**
Watkins, Mark E. On the Cayley index of a group. **80m:20036**

Secondary classifications:

Godsil, C. D. Graphs, groups and polytopes. (**80m:05052**)
Jones, P. R. The Hopf property and free products of semigroups. (**80e:20071**)
Oates-Williams, Sheila Combinatorics—a branch of group theory? (**80m:05053**)
Pessa, Eliano The group of rotations of E_6 and conformal transformations. (Italian. English summary) (**80c:53007**)
Weiss, Richard M. Elations of graphs. (**80k:05067**)

20F34 Fundamental groups and their automorphisms [See also 57M05, 57Sxx.]

Berridge, P. H. (*with* Dunwoody, M. J.) Nonfree projective modules for torsion-free groups. **80k:20041**
Dunwoody, M. J. *See* **Berridge, P. H.**, **80k:20041**
Johnson, Francis E. A. On Poincaré duality groups of poly-linear type and their realisations. **80c:20056**
Marciniak, Zbigniew Poincaré duality groups with one defining relation. (Russian summary) **80k:20042**
Zinde, V. M. Studies of homomorphisms of Artin groups. **80j:20039**

Secondary classifications:

Allenby, R. B. J. T. (*with* Boler, J.; Evans, B.; Moser, L. E.; Tang, C. Y.) Frattini subgroups of 3-manifold groups. (**80b:57001**)
Boler, J. *See* **Allenby, R. B. J. T.; et al.**, (**80b:57001**)
Evans, B. *See* **Allenby, R. B. J. T.; et al.**, (**80b:57001**)
Gorjunov, V. V. The cohomology of braid groups of series C and D and certain stratifications. (Russian) (**80g:32020**)
Moser, L. E. *See* **Allenby, R. B. J. T.; et al.**, (**80b:57001**)
Tang, C. Y. *See* **Allenby, R. B. J. T.; et al.**, (**80b:57001**)
Vaĭnštein, F. V. The cohomology of braid groups. (Russian) (**80g:32019**)

20F36 Braid groups

Assion, Joachim A proof of a theorem of Coxeter. **80l:20018**
Smythe, N. F. The Burau representation of the braid group is pairwise free. **80m:20037**

Secondary classifications:

Stylnev, V. B. Taking the root in the braid group. (Russian) (**80j:57002**)

20F38 Other groups related to topology or analysis

Goldstein, Richard Z. (*with* Turner, Edward C.) Applications of topological graph theory to group theory. **80g:20050**
Kulkes, Kathryn On the monodromy groups of Riemann surfaces of genus zero. **80g:20051**
Turner, Edward C. *See* **Goldstein, Richard Z., 80g:20050**

Secondary classifications:

Fomenko, A. T. *See* **Volodin, I. A., (80h:57014)**
Maeda, Toru A unique decomposition for knot-like groups. **(80h:57003)**
Volodin, I. A. (*with* Fomenko, A. T.) Manifolds. Knots. Algorithms. (Russian) **(80h:57014)**

20F40 Associated Lie structures

Skopin, A. I. A group of exponent 8. (Russian) **80g:20052**
Wall, G. E. Lie methods in group theory. **80h:20057**
On the Lie ring of a group of prime exponent. II. **80h:20052**

Secondary classifications:

Strebel, Ralph A note on groups with torsion-free abelianization and trivial multiplicator. **(80j:20035)**

20F45 Engel conditions

20F50 Periodic groups

Doyle, John Kevin (*with* Mandelberg, K. I.; Vaughan-Lee, M. R.) On solvability of groups of exponent four. **80h:20058**
Hickin, Kenneth K. (*with* Phillips, Richard E.) Joins of periodic groups. **80g:20053**
Mandelberg, K. I. *See* **Doyle, John Kevin; et al., 80h:20058**
Phillips, Richard E. Corrigendum: "Embedding methods for periodic groups" [Proc. London Math. Soc. (3) 35 (1977), no. 2, 238–256; MR 58 #16896]. **80k:20043**
See also **Hickin, Kenneth K., 80g:20053**
Razmyslov, Ju. P. The Hall-Higman problem. (Russian) **80d:20040**
Sozutov, A. I. (*with* Šunkov, V. P.) Infinite groups saturated by Frobenius subgroups. (Russian) **80a:20041**
Šunkov, V. P. *See* **Sozutov, A. I., 80a:20041**
Vaughan-Lee, M. R. *See* **Doyle, John Kevin; et al., 80h:20058**

Secondary classifications:

Holt, D. F. Infinite analogues of a theorem of Gaschütz. **(80e:20063)**
Miller, Jay I. Center-by-metabelian groups of prime exponent. **(80c:20042)**
Of'sanskiĭ, A. Ju. Infinite groups with cyclic subgroups. (Russian) **(80i:20013)**

20F60 Ordered groups [See mainly 06F15.]

Secondary classifications:

Holland, W. Charles (*with* Martinez, Jorge) Accessibility of torsion classes. **(80g:06021)**
Martinez, Jorge *See* **Holland, W. Charles, (80g:06021)**

20F99 None of the above, but in this section

Anthony, J. M. (*with* Sherwood, H.) Fuzzy groups redefined. **80f:20040**
Dennin, John Modular groups revisited. **80f:20041**
Faber, V. (*with* Laver, Richard; McKenzie, R.) Coverings of groups by abelian subgroups. **80f:20042**
Hirshon, Ronald The equivalence of $\times^I C \approx \times^I D$ and $J \times C \approx J \times D$. **80e:20051**
Holsztyński, W. (*with* Strube, R. F. E.) Paths and circuits in finite groups. **80e:20052**
Laver, Richard *See* **Faber, V.; et al., 80f:20042**
McKenzie, R. *See* **Faber, V.; et al., 80f:20042**
Sherwood, H. *See* **Anthony, J. M., 80f:20040**
Strube, R. F. E. *See* **Holsztyński, W., 80e:20052**

Secondary classifications:

Bender, Helmut On the normal p-structure of a finite group and related topics. I. **(80a:20032)**
Kirillov, A. N. Convex polytopes and formal groups. (Russian) **(80j:14038)**
Kowol, G. A class of polynomial permutations on groups. **(80i:20001)**
Majeed, Abdul On torsion-free nonfree linear groups. **(80h:20061)**
Perret, Daniel Une propriété des graphes de Cayley 3 connexes planaires. (English summary) **(80m:05054)**
Quach thi Câm Vân Polynôme d'Alexander des noeuds fibrés. (English summary) **(80j:57003)**
Schupp, Paul E. Groups and graphs. **(80i:05046)**

20Gxx Linear algebraic groups (classical groups) {For arithmetic theory, see 10C30, 10E45; for geometric theory, see 14Lxx, 22Exx; for other methods in representation theory, see 22E45, 22E46, 22E47, 22E50, 22E55.}

Merzljakov, Ju. I. Linear groups. (Russian) **80j:20040**

20G05 Representation theory

Ballard, John W. Injective modules for restricted enveloping algebras. **80b:20053**
Benson, Clark T. The generic degrees of the irreducible characters of E_8. **80f:20043**
Gol'fand, Ja. Ju. The special representation of $Sp(4, F_q)$. (Russian) **80h:20059**
Griffith, Phillip Completions of rings of invariants and their divisor class groups. **80a:20042**
Gyoja, Akihiko Liftings of irreducible characters of finite reductive groups. **80k:20044**
Jantzen, Jens C. Über Darstellungen höherer Frobenius-Kerne halbeinfacher algebraischer Gruppen. **80f:20044**
Kempf, George R. Instability in invariant theory. **80c:20057**
Kuĭkulejs, A. Identities of finite-dimensional representations. (Russian) **80i:20019**
Lees, P. A Steinberg representation for $GL_n(\mathbf{Z}/p^k\mathbf{Z})$. **80a:20043**
Lehrer, G. I. The Schur index of the p-regular characters of the Borel subgroup. **80e:20053**
Lusztig, George ★Representations of finite Chevalley groups. **80f:20045**
Unipotent representations of a finite Chevalley group of type E_8. **80j:20041**
Nagornyĭ, S. V. Complex representations of some classical groups over a finite field. (Russian) **80a:20044**
Complex representations of classical groups over a finite field. (Russian) **80h:20060**
Neuvonen, Timo A complete reducibility criterion with an application to representations of semisimple groups. **80j:20042**
O'Meara, O. T. ★Symplectic groups. **80a:20045**
Pommerening, Klaus Observable radizielle Untergruppen von halbeinfachen algebraischen Gruppen. **80f:20046**
Popov, V. L. A classification of spinors of dimension fourteen. (Russian) **80b:20054**
Shinoda, Ken-ichi Sur le caractère de la représentation de Weil pour un corps fini. (English summary) **80d:20041**
Soto Andrade, Jorge Représentations de certains groupes symplectiques finis. **80g:20054**
Surowski, David B. Permutation characters of finite groups of Lie type. **80i:20020**

Secondary classifications:

Andersen, Henning Haahr Cohomology of line bundles on G/B. **(80j:14044)**
The first cohomology group of a line bundle on G/B. **(80e:14025)**
Chastkofsky, Leonard (*with* Feit, Walter) Projective characters of groups of Lie type. **(80b:20059)**
Dumont-Lepage, M.-Cl. *See* **Gazeau, J. P.; et al., (80h:81027)**
El Samra, N. (*with* King, R. C.) Reduced determinantal forms for characters of the classical Lie groups. **(80j:22011)**
(*with* King, R. C.) Dimensions of irreducible representations of the classical Lie groups. **(80j:22012)**
Feit, Walter *See* **Chastkofsky, Leonard, (80b:20059)**
Frame, J. S. Character formulas for the orthogonal groups over GF(2). **(80k:20012a)**
Character formulas for the orthogonal groups over GF(2). II. **(80k:20012b)**
Garland, Howard The arithmetic theory of loop algebras. **(80a:17012)**
Gazeau, J. P. (*with* Dumont-Lepage, M.-Cl.; Ronveaux, André) Gel'fand lattice polynomials and irreducible representations of $U(n)$. **(80h:81027)**
Hesselink, Wim The normality of closures of orbits in a Lie algebra. **(80g:14018)**
Kempf, George R. The Grothendieck-Cousin complex of an induced representation. **(80g:14042)**
The Hochster-Roberts theorem of invariant theory. **(80g:14040)**
King, R. C. *See* **El Samra, N., (80j:22011)** *and* **El Samra, N., (80j:22012)**
Kopylova, T. I. Minimal irreducible solvable linear groups. (Russian. English summary) **(80c:20060)**
Lancaster, Glenn (*with* Towber, Jacob) Representation-functors and flag-algebras for the classical groups. I. **(80i:14020)**
Morikawa, Hisasi Spaces of moduli of submodules of certain unipotent polynomial representations of nilpotent groups. **(80k:14023)**
Ronveaux, André *See* **Gazeau, J. P.; et al., (80h:81027)**
Schwarz, Gerald W. Representations of simple Lie groups with a free module of covariants. **(80c:14008)**
Representations of simple Lie groups with regular rings of invariants. **(80m:14032)**
Thomson, Michael W. Representations of certain verbal wreath products by matrices. **(80g:20043)**
Towber, Jacob *See* **Lancaster, Glenn, (80i:14020)**
Vinberg, È. B. Classification of homogeneous nilpotent elements of a semisimple graded Lie algebra. (Russian) **(80k:17006)**

20G10 Cohomology theory

Cline, Ed Ext^1 for SL_2. **80e:20054**

Secondary classifications:

Avrunin, George S. A vanishing theorem for second degree cohomology. **(80a:20059)**
Tits, Jacques Reductive groups over local fields. **(80h:20064)**

20G15 Linear algebraic groups over arbitrary fields

Borevič, Z. I. (*with* Dybkova, E. V.; Kolotilina, L. Ju.) Conjugacy of net subgroups in linear groups. (Russian) **80g:20055**
Deodhar, Vinay V. On central extensions of rational points of algebraic groups. **80c:20058**
Dybkova, E. V. *See* **Borevič, Z. I.; et al., 80g:20055**
Ellers, Erich W. Factorization of affinities. **80f:20047**
Radical relations in unitary, symplectic, and orthogonal groups. **80c:20059**
Kambayashi, T. (*with* Margrave, G.) On homomorphisms from algebraic groups to $GL_n(Z)$. **80b:20055**

Kolotilina, L. Ju. *See* **Borevič, Z. I.; et al., 80g:20055**
Kopylova, T. I. Minimal irreducible nonmonomial solvable linear groups of the p^2 degree. (Russian. English summary) **80a:20046**
Minimal irreducible solvable linear groups. (Russian. English summary) **80c:20060**
Majeed, Abdul On torsion-free nonfree linear groups. **80h:20061**
Margrave, G. *See* **Kambayashi, T., 80b:20055**
Moody, Robert V. Polynomial invariants of isometry groups of indefinite quadratic lattices. **80a:20047**
Šmidt, R. A. Subgroups of the general linear group over the field of quotients of a principal ideal ring. (Russian) **80e:20055**
Springer, T. A. Reductive groups. **80h:20062**
Steinberg, Robert Conjugacy in semisimple algebraic groups. **80f:20048**
Sučkov, N. M. Some linear groups with complementary groups. (Russian) **80a:20048**
Wright, David Lee The amalgamated free product structure of $GL_2(k[X_1, \cdots, X_n])$ and the weak Jacobian theorem for two variables. **80a:20049**
Yamazaki, Yasuko On the variety of Borel subgroups containing a given diagonalizable subset. **80f:20049**

Secondary classifications:

Bondarenko, A. A. *See* **Platonov, V. P.; et al., (80d:10035)**
Contou-Carrère, Carlos E. Immeuble de Tits d'un groupe réductif et construction d'une famille de modèles birationnels lisses pour les adhérences des cellules de Schubert généralisées. (English summary) **(80c:14032)**
Ekong, Samuel D. Some results on automorphisms of affine algebraic groups. **(80b:20051)**
Jarden, Moshe Torsion in linear algebraic groups over large algebraic fields. **(80m:12027)**
Johnson, Arnold A. The automorphisms of the orthogonal groups $\Omega_n(V)$, $n > 5$. **(80h:20054)**
Kassel, Christian Un calcul d'homologie du groupe linéaire général. (English summary) **(80d:20045)**
Leos, Ottmar On algebraic groups defined by Jordan pairs. **(80i:17020)**
Murač, M. M. FC-solvable groups of automorphisms with finiteness condition for the abelian normal subgroups of Mal'cev solvable groups. (Russian) **(80c:20032)**
Platonov, V. P. (*with* Bondarenko, A. A.; Rapinčuk, A. S.) Numbers of classes of algebraic groups. (Russian) **(80d:10035)**
Rapinčuk, A. S. *See* **Platonov, V. P.; et al., (80d:10035)**
Wales, David B. Connections between finite linear groups and linear algebra. **(80g:20002)**
Wehrfritz, B. A. F. Hypercentral unipotent subgroups of linear groups. **(80b:20065)**
Weisfeiler, B. On abstract monomorphisms of k-forms of PGL(2). **(80e:14019)**
Winter, David J. Solvable subgroups and their Lie algebras in characteristic p. **(80j:17010)**

20G20 Linear algebraic groups over the reals, the complexes, the quaternions

Dixit, V. N. A note on nilpotent linear group of class 2. **80f:20050**
Grecu, Eftimie Sur la variété du groupe orthogonal simplectique. **80h:20063**
Huffman, W. C. (*with* Sloane, Neil J. A.) Most primitive groups have messy invariants. **80c:20056**
Majeed, Abdul (*with* Mason, A. W.) Solvable-by-finite subgroups of GL(2, F). **80a:20050**
Mason, A. W. *See* **Majeed, Abdul, 80a:20050**
Popov, A. M. Irreducible semisimple linear Lie groups with finite stationary subgroups of general position. (Russian) **80b:20056**
Sloane, Neil J. A. *See* **Huffman, W. C., 80e:20056**
Weisfeiler, B. On abstract homomorphisms of anisotropic algebraic groups over real-closed fields. **80k:20045**

Secondary classifications:

Dias da Silva, J. A. *See* **de Oliveira, G. N., (80m:15019)**
Elašvili, A. G. *See* **Vinberg, È. B., (80b:15039)**
Gomi, Kensaku Finite groups with a standard subgroup isomorphic to Sp(4, 2^n). **(80h:20024)**
Kraft, Hanspeter Bahnenräume bei linearen Darstellungen reduktiver Gruppen. **(80a:14023)**
de Oliveira, G. N. (*with* Dias da Silva, J. A.) Conditions for equality of decomposable symmetric tensors. II. **(80m:15019)**
Vinberg, È. B. (*with* Elašvili, A. G.) A classification of the three-vectors of nine-dimensional space. (Russian) **(80b:15039)**

20G25 Linear algebraic groups over local fields and their integers

Sarkisjan, R. A. The conjugacy problem for collections of integral matrices. (Russian) **80k:20046**
Tits, Jacques Reductive groups over local fields. **80h:20064**
Vavilov, N. A. Parabolic subgroups of Chevalley groups over a semilocal ring. (Russian) **80a:20051**

Secondary classifications:

Djoković, Dragomir Ž. (*with* Malzan, Jerry) Products of reflections in the unitary group. **(80d:22003)**
Ishibashi, Hiroyuki Generators of an orthogonal group over a local valuation domain. **(80f:10023)**
Malzan, Jerry *See* **Djoković, Dragomir Ž., (80d:22003)**
Segal, Daniel Two theorems of polycyclic groups. **(80a:20040)**
Tits, Jacques Groupes de Whitehead de groupes algébriques simples sur un corps (d'après V. P. Platonov et al.). **(80d:12008)**
Voskresenskiĭ, V. E. R-equivalence questions on semisimple groups. (Russian) **(80j:14021)**

20G30 Linear algebraic groups over global fields and their integers

Grunewald, Fritz J. (*with* Segal, Daniel) A note on arithmetic groups. **80c:20061**
Imrich, Wilfried On the number of subgroups of given index in $SL_2(Z)$. **80c:20062**
Rohlfs, J. Arithmetisch definierte Gruppen mit Galoisoperation. **80j:20043**
Segal, Daniel *See* **Grunewald, Fritz J., 80c:20061**
Sosnovskiĭ, Ju. V. Commutator structure of symplectic groups. (Russian) **80b:20057**

Secondary classifications:

Bak, Anthony (*with* Rehmann, Ulf) Le problème des sous-groupes de congruence dans $SL_{n\geq 2}$ sur un corps gauche. (English summary) **(80i:12010)**
Rehmann, Ulf *See* **Bak, Anthony, (80i:12010)**

20G35 Linear algebraic groups over adèles and other rings and schemes

Bachmuth, Seymour (*with* Mochizuki, Horace Y.) Automorphism groups and subgroups of SL_2 over division rings. **80j:20044**
Deligne, Pierre Extensions centrales non résiduellement finies de groupes arithmétiques. (English summary) **80g:20056**
Mochizuki, Horace Y. *See* **Bachmuth, Seymour, 80j:20044**
Sarkisjan, R. A. An occurrence problem for adèle groups. (Russian) **80h:20065**
Vavilov, N. A. Description of the subgroups, containing the group of diagonal matrices, of the general linear group over a semilocal field. (Russian) **80h:20066**

Secondary classifications:

Bauder, A. *See* **Frei, H.; et al., (80b:82046)**
Frei, H. (*with* Groner, P.; Bauder, A.; Günthard, Hs. H.) Isometric group of semi-rigid models: relation to the permutation-inversion group and extension of the concept to non-rigid molecules. **(80b:82046)**
Groner, P. *See* **Frei, H.; et al., (80b:82046)**
Günthard, Hs. H. *See* **Frei, H.; et al., (80b:82046)**
Margulis, G. A. Factor-groups of discrete subgroups. (Russian) **(80a:22013)**

20G40 Linear algebraic groups over finite fields

Aschbacher, Michael (*with* Seitz, G.) Correction to: "Involutions in Chevalley groups over fields of even order" (Nagoya Math. J. 63 (1976), 1–91). **80b:20058**
Azad, H. Semi-simple elements of order 3 in finite Chevalley groups. **80d:20042**
Chastkofsky, Leonard (*with* Feit, Walter) Projective characters of groups of Lie type. **80b:20059**
Cooperstein, Bruce N. An enemies list for factorization theorems. **80a:20052**
Dempwolff, Ulrich Some subgroups of GL(n, 2) generated by involutions. I. **80e:20057a**
Some subgroups of GL(n, 2) generated by involutions. II. **80e:20057b**
Digne, François (*with* Michel, Jean) Nombre de points rationnels des variétés de Deligne-Lusztig et caractères de l'algèbre de Hecke. (English summary) **80h:20067**
Feit, Walter *See* **Chastkofsky, Leonard, 80b:20059**
Harada, Koichiro (*with* Yamaki, Hiroyoshi) The irreducible subgroups of $GL_n(2)$ with $n < 6$. **80c:20063**
Ho, C. Y. Linear transformation and collineation of finite translation planes. **80f:20051**
Hotta, R. (*with* Shimomura, N.) The fixed-point subvarieties of unipotent transformations on generalized flag varieties and the Green functions. Combinatorial and cohomological treatments centering GL_n. **80h:20068**
Kantor, William M. Permutation representations of the finite classical groups of small degree or rank. **80m:20038**
Subgroups of classical groups generated by long root elements. **80g:20057**
Michel, Jean *See* **Digne, François, 80h:20067**
Monahov, V. S. Orders of Sylow subgroups of the general linear group. (Russian) **80c:20064**
Seitz, G. *See* **Aschbacher, Michael, 80b:20058**
Shimomura, N. *See* **Hotta, R., 80h:20068**
Suprunenko, I. D. Subgroups of GL(n, p) containing SL(2, p) in an irreducible representation of degree n. (Russian) **80m:20039**
See also **Zalesskiĭ, A. E., 80g:20059**
Upadhyaya, B. Shreekantha Filtrations with Weyl module quotients of the principal indecomposable modules for the group SL(2, q). **80j:20045**
Vavilov, N. A. Nilpotent self-normalizing subgroups of the general linear group over a finite field. (Russian) **80g:20058**
Wagner, Ascher The minimal number of involutions generating some finite three-dimensional groups. (Italian summary) **80a:20053**
Yamaki, Hiroyoshi *See* **Harada, Koichiro, 80c:20063**
Zalesskiĭ, A. E. (*with* Suprunenko, I. D.) Classification of finite irreducible linear groups of rank 4 over a field of characteristic $p > 5$. (Russian. English summary) **80g:20059**

Secondary classifications:

Adler, Allan On the automorphism group of a certain cubic threefold. **(80d:14026)**
Di Martino, Lino Simple linear groups all of whose involutions are 2-reflections. (Italian summary) **(80c:20015)**
Erdmann, Karin On 2-blocks with semidihedral defect groups. **(80m:20007)**
Ishibashi, Hiroyuki Generators of an orthogonal group over a finite field. **(80a:20022a)**
Correction to the paper: "Generators of an orthogonal group over a finite field" (Czechoslovak Math. J. **28(103)** (1978), no. 3, 419–433). **(80a:20022b)**
Weiss, Richard M. Symmetric graphs with projective subconstituents. **(80h:05031)**
Woltermann, Michael A note on doubly transitive solvable permutation groups. **(80j:20004)**

20G45 Applications to physics; explicit representations

Butler, P. H. (*with* Reid, M. F.) *j* symbols and *jm* factors for all dihedral and cyclic groups. **80g:20060**
Reid, M. F. *See* **Butler, P. H., 80g:20060**

20G99 None of the above, but in this section

Bass, Hyman (*with* Pardon, William) Some hybrid asymplectic group phenomena. **80c:20065**
McDonald, B. R. Automorphisms of $GL_n(R)$. **80a:20054**
Pardon, William *See* **Bass, Hyman, 80c:20065**
Piccard, Sophie Le groupe $G_{\infty n}$ de toutes les transformations périodiques, de période entière quelconque, de l'ensemble **Z** des entiers rationnels. (English summary) **80d:20043**

Secondary classifications:

Gould, M. D. Applications of the characteristic identity for GL(*N*). (French summary) **(80c:17010)**
Kopeiko, V. I. Stabilization of symplectic groups over a ring of polynomials. (Russian) **(80f:13008)**
Meldrum, J. D. P. The endomorphism near-ring of finite general linear groups. **(80b:16046)**
Rehmann, Ulf Zentrale Erweiterungen der speziellen linearen Gruppe eines Schiefkörpers. **(80b:18009)**
Wehrfritz, B. A. F. Nilpotence in groups of semilinear maps. III. **(80b:20015)**

20Hxx Other groups of matrices

20H05 Unimodular groups, congruence subgroups [See also 10D07, 22E40, 51F20.]

Bass, Hyman Variations on the modular group. **80f:20052**
Chiswell, I. M. The Bass-Serre theorem revisited. **80j:20046**
Dickson, N. K. *See* **Mason, A. W., 80j:20047**
Evans, Ronald J. Discrete free products of two complex cyclic matrix groups. **80e:20058**
Mason, A. W. (*with* Dickson, N. K.) On maximal nonparabolic normal subgroups of the modular group. **80j:20047**

Secondary classifications:

Chahal, Jasbir Singh Arithmetic subgroups of SL(*n*, *k*). **(80i:10031)**
A note on the discontinuous subgroups of the orthogonal group. **(80h:10032)**
Gardiner, C. *See* **Rubinstein, J. H., (80j:57010)**
Jørgensen, Troels Comments on a discreteness condition for subgroups of *SL*(2, **C**). **(80h:22013)**
Newman, Morris Normalizers of modular groups. **(80b:10033)**
Rubinstein, J. H. (*with* Gardiner, C.) A note on a 3-dimensional homogeneous space. **(80j:57010)**

20H10 Fuchsian groups and their generalizations [See also 10D07, 22E40, 30F35, 32Nxx.]

Billiet, Yves Le groupe *P*1 et ses sous-groupes. I. Outillage mathématique: automorphisme et factorisation matricielle. (English summary) **80c:20066**
Chetiya, B. P. On a theorem of Poincaré. **80c:20067**
Lehner, Joseph On *pqr*-groups. **80f:20053**
Mason, A. W. (*with* Stothers, W. W.) Remarks on a theorem of L. Greenberg on the modular group. **80e:20059**
Stothers, W. W. Subgroups of infinite index in the modular group. **80b:20060**
Diagrams associated with subgroups of Fuchsian groups. **80j:20048**
See also **Mason, A. W., 80e:20059**

Secondary classifications:

Ando, Kiyoshi (*with* Mizuno, Hirobumi) On certain discontinuous groups. I. (Japanese. English summary) **(80f:32022)**
Canov, V. V. On the characterization of hyperelliptic Riemann surfaces. **(80j:30071)**
Dickson, N. K. *See* **Mason, A. W., (80j:20047)**
Godsil, C. D. (*with* Imrich, Wilfried; Razen, R. A.) On the number of subgroups of given index in the modular group. **(80k:10019)**
Gramberg, Edelgard (*with* Zieschang, Heiner) Order reduced Reidemeister-Schreier subgroup presentations and applications. **(80k:20034)**
Imrich, Wilfried *See* **Godsil, C. D.; et al., (80k:10019)**
Kalia, R. N. (*with* Rosenberger, Gerhard) Automorphisms of the Fuchsian groups of type (0; 2, 2, 2, *q*; 0). **(80a:10039)**
Mason, A. W. (*with* Dickson, N. K.) On maximal nonparabolic normal subgroups of the modular group. **(80j:20047)**
Mizuno, Hirobumi *See* **Ando, Kiyoshi, (80f:32022)**
Mostow, G. D. Discrete subgroups of Lie groups. **(80m:22013)**
Nakada, Masami Dimension of cohomology spaces of infinitesimally deformed Kleinian groups. **(80j:30072)**
Purzitsky, Norman A cutting and pasting of noncompact polygons with applications to Fuchsian groups. **(80k:30045)**
Razen, R. A. *See* **Godsil, C. D.; et al., (80k:10019)**
Rosenberger, Gerhard *See* **Kalia, R. N., (80a:10039)**
Scharlemann, Martin Subgroups of SL(2, **R**) freely generated by three parabolic elements. **(80k:10020)**
Wielenberg, Norbert The structure of certain subgroups of the Picard group. **(80b:57010)**
Zieschang, Heiner *See* **Gramberg, Edelgard, (80k:20034)**

20H15 Other geometric groups, including crystallographic groups [See also 51–XX, especially 51F15.]

Ammann, André Étude et classification des réseaux qui vérifient les conditions de symétrie caractéristiques des différents sous-groupes de $^*G$. **80b:20061**
Berar, Jean François *See* **Weigel, Dominique, 80a:20057**
Bertaut, E. F. (*with* Billiet, Yves) On equivalent subgroups and supergroups of the space groups. **80f:20054**
Billiet, Yves (*with* Sayari, Abdelhamid; Zarrouk, Hédi) L'association des familles de Wyckoff dans les changements de repère conventionnel des groupes spatiaux et les passages aux sous-groupes spatiaux. (English summary) **80b:20062**
See also **Sayari, Abdelhamid; et al., 80c:20069** *and* **Bertaut, E. F., 80f:20054**
Djoković, Dragomir Ž. (*with* Malzan, Jerry) Products of reflections in the quaternionic unitary group. **80f:20055**
Gorzkowski, Waldemar (*with* Suffczyński, Maciej) The subgroups of the double crystallographic point groups. (Russian summary) **80a:20055**
Hubbard, R. Colour symmetry in crystallographic space groups. **80b:20063**
Kopský, Vojtěch Extended integrity bases of irreducible matrix groups—the crystal point groups. **80c:20060a**
Clebsch-Gordan products and extended integrity bases of crystallographic double point groups. **80e:20060b**
Malzan, Jerry *See* **Djoković, Dragomir Ž., 80f:20055**
Maxwell, George On the automorphism groups of space groups. **80c:20068**
Morgan, C. L. On counting types of symmetries in finite unitary reflection groups. **80e:20061**
Oates-Williams, Sheila (*with* Street, Anne Penfold) The analysis of colour symmetry. **80f:20021**
Sayari, Abdelhamid (*with* Billiet, Yves; Zarrouk, Hédi) Complete list of subgroups and changes of standard setting of two-dimensional space groups. **80c:20069**
See also **Billiet, Yves; et al., 80b:20062**
Sivardière, Jean Classes d'éléments conjugués des groupes cristallographiques. (English summary) **80a:20056**
Street, Anne Penfold *See* **Oates-Williams, Sheila, 80f:20021**
Suffczyński, Maciej *See* **Gorzkowski, Waldemar, 80a:20055**
Weigel, Dominique (*with* Berar, Jean François) Définition algébrique des groupes de symétrie (d'isométries) des cristaux et autres objets parfaits de l'espace à *n* dimensions. (English summary) **80a:20057**
Zarrouk, Hédi *See* **Billiet, Yves; et al., 80b:20062** *and* **Sayari, Abdelhamid; et al., 80c:20069**

Secondary classifications:

Bernšteĭn, I. N. (*with* Švarcman, O. V.) Chevalley's theorem for complex crystallographic Coxeter groups. (Russian) **(80d:32007)**
Boyle, L. L. (*with* Parker, Yvonne M.) Symmetry coordinates and vibration frequencies for an icosahedral cage. **(80k:81185)**
van den Broek, P. M. Selection rules for Shubnikov space groups. **(80a:20015)**
Burdina, V. I. Types of stereohedra of revolution for the group 3×432. (Russian) **(80b:51013)**
Bürgi, Hans-Beat *See* **Murray-Rust, Peter; et al., (80i:81074)**
Bussemaker, F. C. (*with* Cvetković, Dragoš M.; Seidel, J. J.) Graphs related to exceptional root systems. **(80g:05049)**
Cracknell, A. P. (*with* Davies, B. L.; Kunert, H.; Popenda, J.; Suffczyński, Maciej) Selection rules for the holosymmetric double space groups based on the body-centred cubic Bravais lattice. **(80i:82025)**
Cvetković, Dragoš M. *See* **Bussemaker, F. C.; et al., (80g:05049)**
Davies, B. L. *See* **Cracknell, A. P.; et al., (80i:82025)**
Dellepiane, Giovanna On the unique determination of the completely reduced representation of the symmetry group for nonrigid molecules. **(80j:81089)**
Dunitz, Jack D. *See* **Murray-Rust, Peter; et al., (80i:81074)**
Ericksen, J. L. On the symmetry of deformable crystals. **(80k:82031)**
Ezra, G. S. On the symmetry properties of nonrigid molecules. A unified approach. **(80i:81075)**
Fischer, Werner (*with* Koch, Elke) Limiting forms and comprehensive complexes for crystallographic point groups, rod groups and layer groups. (German summary) **(80b:82051)**
See also **Koch, Elke, (80b:82050)** *and* **Koch, Elke, (80g:52013)**
Flatto, Leopold Invariants of finite reflection groups. **(80j:14010)**
Gaaff, A. (*with* Hijmans, J.) Interpretation of the symmetry group of the homogeneous 16-vertex model in terms of Lorentz similarity transformations. **(80b:82004)**
Galjarskiĭ, È. I. *See* **Zamorzaev, A. M.; et al., (80j:51013)**
Grünbaum, Branko (*with* Shephard, G. C.) The homeomeric classification of patterns. **(80c:51014)**
Hauptman, Herbert Probabilistic theory of the three-phase structure seminvariant in the space group $P\bar{1}$. **(80j:82025)**
Hijmans, J. *See* **Gaaff, A., (80b:82004)**
Hirsch, Morris W. Flat manifolds and the cohomology of groups. **(80g:57057)**
Hosoya, Masahiko A new group-theoretical derivation of the Bravais lattices. **(80g:82037)**
Johnson, N. L. (*with* Ostrom, T. G.) The translation planes of order 16 that admit PSL(2, 7). **(80h:51011)**
Koch, Elke (*with* Fischer, Werner) Complexes for crystallographic point groups, rod groups and layer groups. (German summary) **(80b:82050)**
(*with* Fischer, Werner) Types of sphere packings for crystallographic point groups, rod groups and layer groups. (German summary) **(80g:52013)**
See also **Fischer, Werner, (80b:82051)**
Kopcik, V. A. *See* **Kužukeev, Ž.-N. M., (80k:82064)**
Kopský, Vojtěch Tensorial covariants for the 32 crystal point groups. **(80i:82026)**
Kunert, H. *See* **Cracknell, A. P.; et al., (80i:82025)**
Kužukeev, Ž.-N. M. (*with* Kopcik, V. A.) Symmetry groups of colored polyhedra and colored simple forms. **(80k:82064)**

Maksimov, A. F. The solution of problems that are connected with the determination of dynamical characteristics of an alloy model by dispersion curves. (Russian) **(80d:82058)**
Murray-Rust, Peter (*with* Bürgi, Hans-Beat; Dunitz, Jack D.) Description of molecular distortions in terms of symmetry coordinates. **(80l:81074)**
Nourse, James G. (*with* Smith, Dennis H.) Nonnumerical mathematical methods in the problem of stereoisomer generation. **(80j:80007)**
Ohsumi, K. *See* **Sadanaga, R., (80b:82034)**
Ostrom, T. G. *See* **Johnson, N. L., (80b:51011)**
Ott, Udo Fahnentransitive Ebenen ungerader Ordnung. **(80b:51003)**
Palistrant, A. F. *See* **Zamorzaev, A. M.; et al., (80j:51013)**
Parker, Yvonne M. *See* **Boyle, L. L., (80k:81185)**
Popenda, J. *See* **Cracknell, A. P.; et al., (80i:82025)**
Sadanaga, R. (*with* Ohsumi, K.) Basic theorems of vector symmetry in crystallography. **(80b:82034)**
Seidel, J. J. *See* **Bussemaker, F. C.; et al., (80g:05049)**
Sekiguchi, Jirō (*with* Yano, Tamaki) The algebra of invariants of the Weyl group $W(F_4)$. **(80k:32011)**
(*with* Yano, Tamaki) A note on the Coxeter group of type H_3. **(80k:32012)**
Shephard, G. C. *See* **Grünbaum, Branko, (80c:51014)**
Smith, Dennis H. *See* **Nourse, James G., (80j:80007)**
Sufczyński, Maciej *See* **Cracknell, A. P.; et al., (80i:82025)**
Švarcman, O. V. *See* **Bernštein, I. N., (80d:32007)**
Yano, Tamaki *See* **Sekiguchi, Jirō, (80k:32011)** *and* **Sekiguchi, Jirō, (80k:32012)**
Zamorzaev, A. M. (*with* Galjarskiĭ, È. I.; Palistrant, A. F.) ★Цветная симметрия, ее обобщения и приложения. (Russian) [Color symmetry, its generalizations and applications] **(80j:51013)**
Zamorzaeva, E. A. Classification of regular tilings of the plane for similarity symmetry groups. (Russian) **(80j:51014)**

20H20 Other matrix groups over fields

Evans, Ronald J. Nonfree groups generated by two parabolic matrices. **80h:20069**
Kasparek, Erwin Sur les homomorphismes du groupe des matrices cycliques dans le groupe multiplicatif des nombres réels. (Polish summary) **80b:20064**
Škuratskiĭ, A. I. The problem of the generation of free groups by two unitriangular matrices. (Russian) **80d:20044**
Wehrfritz, B. A. F. Hypercentral unipotent subgroups of linear groups. **80b:20065**
On the Lie-Kolchin-Mal'cev theorem. **80c:20070**

20H25 Other matrix groups over rings

Gudivok, P. M. (*with* Kiriljuk, O. A.) Sylow p-subgroups of the general linear group over a discrete valuation ring. (Russian. English summary) **80i:20022**
Kiriljuk, O. A. *See* **Gudivok, P. M., 80i:20022**
Suprunenko, D. A. On unipotent groups of matrices over a division ring. (Russian) **80k:20047**

Secondary classifications:

Bachmuth, Seymour (*with* Mochizuki, Horace Y.) Automorphism groups and subgroups of SL_2 over division rings. **(80j:20044)**
Bate, James A. *See* **Luedeman, John K., (80j:16005)**
Ishibashi, Hiroyuki Generators of $O_n(V)$ over a quasisemilocal semihereditary domain. **(80g:10024)**
Luedeman, John K. (*with* Bate, James A.) The ring of quotients of $R(S)$. **(80j:16005)**
Mochizuki, Horace Y. *See* **Bachmuth, Seymour, (80j:20044)**

20H30 Other matrix groups over finite fields

Barry, Michael J. J. Large abelian subgroups of Chevalley groups. **80c:20071**

Secondary classifications:

Suprunenko, I. D. Subgroups of $GL(n, p)$ containing $SL(2, p)$ in an irreducible representation of degree n. (Russian) **(80m:20039)**

20H99 None of the above, but in this section

Secondary classifications:

Benson, Clark T. The generic degrees of the irreducible characters of E_8. **(80f:20043)**
Buriak, Ja. A. Automorphisms of the one-dimensional general affine group over a division ring. (Russian) **(80e:20041)**

20Jxx Connections with homological algebra and category theory

20J05 Homological methods in group theory

Cassidy, Charles (*with* Hilton, Peter) L'isolateur d'un homomorphisme de groupes. **80i:20023**
Chapman, G. R. Relative cohomology groups of low dimension. **80b:20070**
Dunwoody, M. J. Accessibility and groups of cohomological dimension one. **80i:20024**
Garfinkel, Gerald S. (*with* Wu, Yel Chiang) Cohomology and special extensions of groups. **80b:20066**
Gildenhuys, Dion Classification of soluble groups of cohomological dimension two. **80c:20062**
Hilton, Peter *See* **Cassidy, Charles, 80i:20023**
Holt, D. F. An interpretation of the cohomology groups $H^n(G, M)$. **80m:20040**
Infinite analogues of a theorem of Gaschütz. **80e:20063**
Horadam, K. J. The mapping cylinder resolution for a groupnet diagram. **80m:20041**
Huebschmann, Johannes Cohomology theory of aspherical groups and of small cancellation groups. **80e:20064**
Kassel, Christian Un calcul d'homologie du groupe linéaire général. (English summary) **80d:20045**
Maazen, Hendrik Stabilité de l'homologie de GL_n. (English summary) **80f:20056**
Robinson, Derek J. S. On the homology of hypercentral groups. **80g:20062**
Homology of group extensions with divisible abelian kernel. **80g:20061**
Schmid, Peter Group extensions and splitting modules. **80a:20058**
Singh, T. Gokulchandra Some bounds for the multiplicator of a finite group. **80j:20049**
Wu, Yel Chiang *See* **Garfinkel, Gerald S., 80b:20066**

Secondary classifications:

Carlson, Jon F. The dimensions of periodic modules over modular group algebras. **(80d:20007)**
Johnson, Francis E. A. On groups which act freely on vector bundles over spheres. **(80k:57078)**
Müller, Heinz Groupes et paires de groupes à dualité de Poincaré de dimension 2. (English summary) **(80i:20017)**
Rotman, Joseph J. ★An introduction to homological algebra. **(80k:18001)**

20J06 Cohomology of finite groups

Avrunin, George S. A vanishing theorem for second degree cohomology. **80a:20059**
Bell, Gregory W. On the cohomology of the finite special linear groups. I, II. **80i:20025**
Cohomology of degree 1 and 2 of the Suzuki groups. **80c:20072**
Küsefoglu, Ayse Soysal The second degree cohomology of finite orthogonal groups. I. **80i:20026**

Secondary classifications:

Williams, Julian S. Trace ideals of relation modules of finite groups. **(80b:20004)**

20J10 Groups arising as cohomology groups

Bieri, Robert (*with* Eckmann, Beno) Relative homology and Poincaré duality for group pairs. **80k:20048**
Eckmann, Beno *See* **Bieri, Robert, 80k:20048**
Houghton, C. H. The first cohomology of a group with permutation module coefficients. **80c:20073**
Ratcliffe, John G. Crossed extensions. **80m:20042**

Secondary classifications:

Garfinkel, Gerald S. (*with* Wu, Yel Chiang) Cohomology and special extensions of groups. **(80b:20066)**
Wu, Yel Chiang *See* **Garfinkel, Gerald S., (80b:20066)**

20J15 Category of groups

20J99 None of the above, but in this section

Quillen, Daniel Homotopy properties of the poset of nontrivial p-subgroups of a group. **80k:20049**

20Kxx Abelian groups

20K01 Finite abelian groups

Halsey, George D. (*with* Hewitt, Edwin) Eine gruppentheoretische Methode in der Musiktheorie. **80g:20063**
Hewitt, Edwin *See* **Halsey, George D., 80g:20063**

20K05 Finitely generated groups

Secondary classifications:

Hausmann, Jean-Claude (*with* Kervaire, Michel) Sur le centre des groupes de noeuds multidimensionnels. (English summary) **(80c:57011)**
Kervaire, Michel *See* **Hausmann, Jean-Claude, (80c:57011)**

20K10 Torsion groups, primary groups and generalized primary groups

Dobrica, V. P. (*with* Nurtazin, A. T.; Hisamiev, N. G.) Constructive periodic abelian groups. (Russian) **80b:20067**
Goldsmith, B. Essentially-rigid families of abelian p-groups. **80a:20060**
Hisamiev, N. G. *See* **Dobrica, V. P.; et al., 80b:20067**
Megibben, Charles K. Projection-invariant subgroups of abelian groups. **80a:20061**
Totally quasicomplete p-groups need not be torsion-complete. **80g:20064**
Nurtazin, A. T. *See* **Dobrica, V. P.; et al., 80b:20067**

Secondary classifications:

Cellars, Ralph M. *See* **Irwin, John M.; et al., (80m:20044)**
Hisamiev, N. G. Strongly constructive periodic abelian groups. (Russian. Kazakh summary) **(80b:03040)**
Irwin, John M. (*with* Cellars, Ralph M.; Snabb, Thomas) A functorial generalization of Ulm's theorem. **(80m:20044)**
Khan, Mohammad Zubair Modules behaving like torsion abelian groups. II. **(80c:16020)**
Singh, Surjeet Some decomposition theorems on abelian groups and their generalisations. II. **(80g:16007)**
Snabb, Thomas *See* **Irwin, John M.; et al., (80m:20044)**

20K12 Ulm sequences

20K15 Torsion free groups, finite rank

Jackett, David R. The type set of a torsion-free abelian group of rank two. **80h:20071**
Mutzbauer, O. Klassifizierung torsionsfreier abelscher Gruppen des Ranges 2. II. **80h:20072**
Schultz, Phillip The typeset and cotypeset of a rank 2 abelian group. **80a:20062**
Stratton, A. E. The type set of torsion-free rings of finite rank. **80i:20027**
(*with* Webb, M. C.) Type sets and nilpotent multiplications. **80h:20073**
Vinsonhaler, C. Almost quasi-pure injective abelian groups. **80f:20057**
Webb, M. C. *See* **Stratton, A. E., 80h:20073**

Secondary classifications:

Webb, M. C. The endomorphism ring of pointed separable torsion-free abelian groups. **(80a:20064)**

20K20 Torsion free groups, infinite rank

Cornelius, E. F., Jr. Characterization of a class of torsion free groups in terms of endomorphisms. **80e:20065**
Ivanov, A. M. Radicals in the category of all abelian groups without torsion. (Russian) **80i:20028**
Schultz, Phillip Annihilator classes of torsion-free abelian groups. **80h:20074**
Wald, Burkhard A note on slender groups. **80c:20074**
Webb, M. C. Nilpotent torsion-free rings and triangles of types. **80h:20075**

Secondary classifications:

Webb, M. C. The endomorphism ring of homogeneously decomposable separable groups. **(80f:20059)**
The endomorphism ring of pointed separable torsion-free abelian groups. **(80a:20064)**

20K21 Mixed groups

Bican, Ladislav Factor-splitting abelian groups of arbitrary rank. **80e:20066**
A splitting criterion for abelian groups. **80e:20067**
Moskalenko, A. I. Splitting lengths of an abelian group. (Russian) **80f:20058**

Secondary classifications:

Benabdallah, Khalid (*with* Bradley, Raymond) Sur les groupes quasi-*p*-purs-projectifs. **(80f:20060)**
Bradley, Raymond *See* **Benabdallah, Khalid, (80f:20060)**

20K25 Direct sums, direct products, etc.

Dugas, Manfred (*with* Göbel, Rüdiger) Die Struktur kartesischer Produkte ganzer Zahlen modulo kartesische Produkte ganzer Zahlen. **80k:20050**
Fraser, Owen H. (*with* Gordon, Basil) Solution to a problem of A. D. Sands. **80e:20068**
Göbel, Rüdiger *See* **Dugas, Manfred, 80k:20050**
Gordon, Basil *See* **Fraser, Owen H., 80e:20068**
Soifer, A. Ju. Large direct summands of abelian groups. (Russian) **80b:20068**
Stanton, Robert O. Almost-affable abelian groups. **80i:20029**
Surmanidze, O. Ė. Direct decomposition of linearly discrete abelian groups. (Russian. Georgian and English summaries) **80a:20063**
Zimmermann-Huisgen, Birge On Fuchs' problem 76. **80h:20076**

Secondary classifications:

Pride, Stephen J. On groups of finite height. **(80m:20028)**

20K26 Indecomposable groups

Paljutin, E. A. Indecomposable ω_1-free abelian groups. (Russian) **80d:20046**

20K27 Subgroups

Benabdallah, Khalid (*with* Birtz, Alain) Abelian groups where sums of pure subgroups are pure. **80k:20051**
Birtz, Alain *See* **Benabdallah, Khalid, 80k:20051**
Khan, Mohammad Zubair Large and high subgroup. **80k:20052**

20K30 Automorphisms, homomorphisms, endomorphisms, etc.

May, Warren Endomorphism rings of abelian groups with ample divisible subgroups. **80d:20047**
Webb, M. C. The endomorphism ring of homogeneously decomposable separable groups. **80f:20059**
The endomorphism ring of pointed separable torsion-free abelian groups. **80a:20064**

Secondary classifications:

Hausen, Jutta Quasi-regular ideals of some endomorphism rings. **(80c:16028)**
Mutzbauer, O. Klassifizierung torsionsfreier abelscher Gruppen des Ranges 2. II. **(80h:20072)**

20K35 Extensions

Huber, Martin (*with* Warfield, Robert B., Jr.) On the torsion subgroup of $\mathrm{Ext}(A, G)$. **80h:20077**
Mashhood, Asif On pure-high subgroups of abelian groups. **80h:20078**
Warfield, Robert B., Jr. *See* **Huber, Martin, 80h:20077**

Secondary classifications:

Richman, Fred (*with* Walker, Elbert A.) Valuated groups. **(80k:20053)**
Walker, Elbert A. *See* **Richman, Fred, (80k:20053)**

20K40 Homological and categorical methods

Benabdallah, Khalid (*with* Bradley, Raymond) Sur les groupes quasi-*p*-purs-projectifs. **80f:20060**
Boshoff, C. J. Some properties of fine subgroups in abelian group theory. (Afrikaans) **80f:20061**
Bradley, Raymond *See* **Benabdallah, Khalid, 80f:20060**
Cellars, Ralph M. *See* **Irwin, John M.; et al., 80m:20044**
Eklof, Paul C. (*with* Huber, Martin) Abelian group extensions and the axiom of constructibility. **80m:20043**
Fuchs, Laszlo (*with* Salce, L.) On almost totally injective *p*-groups and cotorsion groups. **80i:20030**
Hiller, Howard L. Radicals and local freeness. **80h:20079**
Huber, Martin *See* **Eklof, Paul C., 80m:20043**
Irwin, John M. (*with* Cellars, Ralph M.; Snabb, Thomas) A functorial generalization of Ulm's theorem. **80m:20044**
Pretorius, L. M. Maximal classes of abelian groups that arise from the isomorphism $G \cong T[\mathrm{Ext}(X, G)]$. (Afrikaans) **80f:20062**
Richman, Fred (*with* Walker, Elbert A.) Valuated groups. **80k:20053**
Salce, L. *See* **Fuchs, Laszlo, 80i:20030**
Snabb, Thomas *See* **Irwin, John M.; et al., 80m:20044**
Walker, Elbert A. *See* **Richman, Fred, 80k:20053**

Secondary classifications:

Angad-Gaur, H. W. K. The homological dimension of a torsion-free abelian group of finite rank as a module over its ring of endomorphisms. **(80f:16034)**
Aoe, Hitoshi On the Whitehead problem. **(80a:03066)**
Huber, Martin (*with* Warfield, Robert B., Jr.) On the torsion subgroup of $\mathrm{Ext}(A, G)$. **(80h:20077)**
Mashhood, Asif On pure-high subgroups of abelian groups. **(80h:20078)**
Warfield, Robert B., Jr. *See* **Huber, Martin, (80h:20077)**

20K45 Topological methods

Dugas, Manfred (*with* Göbel, Rüdiger) Algebraisch kompakte Faktorgruppen. **80h:20080**
Göbel, Rüdiger *See* **Dugas, Manfred, 80h:20080**
Goldsmith, B. A topological approach to a problem of Nunke. **80a:20065**

Secondary classifications:

Khan, Mohammad Zubair Large and high subgroup. **(80k:20052)**
Muhin, Ju. N. (*with* Protasov, I. V.) Projections of topological abelian groups. (Russian) **(80c:22006)**
Protasov, I. V. *See* **Muhin, Ju. N., (80c:22006)**

20K99 None of the above, but in this section

Bican, Ladislav Pure subgroups split. **80h:20081**
Göbel, Rüdiger (*with* Prelle, Rainer) Solution of two problems on cotorsion abelian groups. **80f:20063**
Grätzer, George (*with* Padmanabhan, R.) Symmetric difference in abelian groups. **80m:20045**
Kaplansky, Irving Five theorems on abelian groups. **80d:20048**
Padmanabhan, R. *See* **Grätzer, George, 80m:20045**
Prelle, Rainer *See* **Göbel, Rüdiger, 80f:20063**
Ryčkov, S. S. (*with* Stepanov, V. I.) A characterization of the algebraic compactness of abelian groups. (Russian) **80k:20054**
Stepanov, V. I. *See* **Ryčkov, S. S., 80k:20054**

Secondary classifications:

Deissler, Rainer Minimal and prime models of complete theories of torsion free abelian groups. **(80e:03035)**
Hisamiev, N. G. The periodic part of a strongly constructivizable abelian group. (Russian) **(80c:03046)**
(McKiernan, M. A.) *See* **Székelyhidi, László, (80h:39011)**
Székelyhidi, László Remark on a paper of M. A. McKiernan: "On vanishing *n*th ordered differences and Hamel-bases" [Ann. Polon. Math. **19** (1967), 331–336; MR 36 #4183]. **(80h:39011)**

20Lxx Groupoids (small categories in which all morphisms are isomorphisms)

20L05 General theory

Fotedar, Girdhari Lal A weak associative law and its bearing on isotopy. **80a:20066**
Frenkin, B. R. Reducibility of *n*-groupoids with division. (Russian) **80g:20065**

Ježek, Jaroslav (*with* Kepka, Tomáš) Quasitrivial and nearly quasitrivial distributive groupoids and semigroups. (Russian and Czech summaries) **80c:20075**
Kepka, Tomáš Commutative distributive groupoids. (Russian and Czech summaries) **80c:20076**
Medial division groupoids. (Russian and Czech summaries) **80j:20050**
(*with* Němec, Petr) *Quasigroups whose regular mappings are automorphisms.* **80j:20051**
(*with* Němec, Petr) Notes on distributive groupoids. **80j:20052**
Distributive division groupoids. **80j:20053**
See also **Ježek, Jaroslav, 80c:20075**
Lee, Sin Min (*with* Sein, Aye) On some extreme properties of a class of simple groupoids. **80k:20055**
Němec, Petr *See* **Kepka, Tomáš, 80j:20051** *and* **Kepka, Tomáš, 80j:20052**
Nirmala Kumari Amma, K. Pseudocomplements in groupoids. **80c:20077**
Sein, Aye *See* **Lee, Sin Min, 80k:20055**

Secondary classifications:

Chandran, V. R. (*with* Padmanabhan, R.) Cyclic identities and associativity. **(80j:20058)**
Ljapin, E. S. Abstract characterization of partial groupoids of words with synonyms. **(80j:20056)**
Mackenzie, K. A. Rigid cohomology of topological groupoids. **(80i:22011)**
Padmanabhan, R. *See* **Chandran, V. R., (80j:20058)**

20L10 Connections with group theory

Verloren van Themaat, W. A. Right-divisive groups. **80c:20078**

Secondary classifications:

Horadam, K. J. The mapping cylinder resolution for a groupnet diagram. **(80m:20041)**

20L13 Mappings of groupoids

20L15 Connections with topology

Secondary classifications:

Barnhardt, J. Distributive groupoids and biassociativity. **(80i:22009)**
Heath, Philip R. (*with* Kamps, Klaus Heiner) Groupoids and classification sequences. **(80m:55025)**
Kamps, Klaus Heiner *See* **Heath, Philip R., (80m:55025)**

20L17 Connections with category theory

20L99 None of the above, but in this section

Schultz, Barbara Über die zu endlichen Körpern gehörigen induktiven Gruppoide. **80c:20079**

Secondary classifications:

Länger, Helmut Induced groupoids and induced semigroups. **(80e:20080)**
Schultz, Barbara Über die zu endlichen zyklischen Ringen gehörigen induktiven Gruppoide. **(80g:16048)**

20Mxx Semigroups

(Vagner, V. V.) *See* **Theory of semigroups and its applications, 80d:20049**
Proceedings:
Symposium on Semigroups ★Proceedings of the 2nd Symposium on Semigroups. **80c:20069**
Semigroups *See* **Theory of semigroups and its applications, 80d:20049** *and* **Proceedings: Symposium on Semigroups, 80c:20069**
Symposium:
Semigroups *See* **Proceedings: Symposium on Semigroups, 80c:20069**
Theory of semigroups and its applications ★Теория полугрупп и ее приложения. Вып. 4. (Russian) [Theory of semigroups and its applications. No. 4] **80d:20049**
Tokyo *See* **Proceedings: Symposium on Semigroups, 80c:20069**

Secondary classifications:

Adu, David I. Connected CM-homomorphisms into semigroups of closed binary relations on hereditarily locally connected continua. **(80d:54040)**
Petrich, Mario The ladder relation in groups, rings, lattices, and semigroups. **(80k:20035)**
(Poliák, G.) *See* **Algebraic theory of semigroups, (80d:20001)**
Reutenauer, Christophe Sur les séries rationnelles en variables non commutatives. **(80e:68196)**
Toyose, Flemming The naive approach to the Hahn-Banach theorem. **(80b:46006)**
Algebraic theory of semigroups ★Algebraic theory of semigroups. **(80d:20001)**
Colloquia Mathematica Societatis János Bolyai *See* **Algebraic theory of semigroups, (80d:20001)**
Conference:
Algebraic Theory of Semigroups *See* **Algebraic theory of semigroups, (80d:20001)**
Semigroups *See* **Algebraic theory of semigroups, (80d:20001)**
Szeged *See* **Algebraic theory of semigroups, (80d:20001)**

20M05 Free semigroups, generators and relations, word problem

Benois, Michèle Présentation et simplifiabilité de certains monoïdes. **80e:20070**
Boé, Jean Marie Reconnaisseurs pour les sous-monoïdes libres. **80d:20050**
Brenner, J. L. (*with* Charnow, A.) Free semigroups of 2×2 matrices. **80a:20067**
Charnow, A. *See* **Brenner, J. L., 80a:20067**
Chu, Danny D. (*with* T'ang, Hsiang Shêng) Another proof on a theorem of Lyndon and Schützenberger in a free monoid. **80a:20070**
Clifford, Alfred H. *The free completely regular semigroup on a set.* **80k:20082a**
Duval, Jean-Pierre Périodes et répétitions des mots du monoïde libre. (English summary) **80j:20054**
Gilman, Robert H. Presentations of groups and monoids. **80j:20055**
Jones, P. R. The Hopf property and free products of semigroups. **80e:20071**
Jürgensen, H. Über das Rechnen mit den Elementen abstrakt präsentierter Halbgruppen. **80d:20051**
Kaĭluvcev, E. V. On the word problem for special semigroups. (Russian) **80c:20080**
Kim, Ki Hang (*with* Roush, Fred W.) The semigroup of adjacency patterns of words. **80h:20083**
Kiseleva, L. G. Algebraic investigation of elementary codes and coefficientless equations in words. (Russian) **80m:20046**
Lascoux, Alain (*with* Schützenberger, Marcel Paul) Croissance des polynômes de Foulkes-Green. (English summary) **80d:20052**
Ljapin, E. S. Abstract characterization of partial groupoids of words with synonyms. **80j:20056**
Identities of successively annihilating bands of semigroups. (Russian) **80g:20066**
Makanin, G. S. Algorithmic decidability of the rank of constant-free equations in a free semigroup. (Russian) **80b:20069**
Identification of the rank of equations in a free semigroup. (Russian) **80b:20084**
Oehmke, Robert H. On right congruences of semigroups. **80a:20068**
Oganesjan, G. U. Problems of equality and divisibility in a semigroup with a defining relation of the form $a = bA$. (Russian) **80b:20070**
Reis, C. M. A note on homomorphisms of a free monoid. **80a:20069**
Roush, Fred W. *See* **Kim, Ki Hang, 80h:20083**
Sarkisjan, O. A. Some relations between word problems and divisibility problems in groups and semigroups. (Russian) **80k:20056**
Schützenberger, Marcel Paul *See* **Lascoux, Alain, 80d:20052**
Simon, Imre Limited subsets of a free monoid. **80e:20072**
Szendrei, Mária B. On subband-parcelling congruences of orthodox semigroups. **80f:20064**
T'ang, Hsiang Shêng *See* **Chu, Danny D., 80a:20070**
Ustjan, A. E. Relations of the form $X = AXB$ in semigroups of class K. (Russian) **80a:20071**
Venkatesan, P. S. On right unipotent semigroups. II. **80c:20071**

Secondary classifications:

Cochet, Yves Church-Rosser congruences on free semigroups. **(80i:03051)**
Ehrenfeucht, Andrzej (*with* Rozenberg, Grzegorz) Simplifications of homomorphisms. **(80a:20080)**
Fortunatov, V. A. Perfect ideal extensions. (Russian) **(80f:20065)**
Hsieh, Wen Yau (*with* Shih, Hui Jan) Left cancellative elements in the monoid of languages. **(80j:20073)**
Lin, Kuang Nan (*with* Shih, Hui Jan) Disjunctive pairs and related languages on a free monoid. **(80i:20056)**
Oganesjan, G. U. A class of semigroups with a solvable word problem. (Russian) **(80i:03055)**
Restivo, Antonio Sur les sous-monoïdes très purs. **(80d:20065)**
Rozenberg, Grzegorz *See* **Ehrenfeucht, Andrzej, (80a:20080)**
Rozenblat, B. V. Positive theories of free inverse semigroups. (Russian) **(80m:03079)**
Salomaa, Arto K. Equality set for homomorphisms of free monoids. **(80d:68096)**
Shih, Hui Jan *See* **Lin, Kuang Nan, (80i:20056)** *and* **Hsieh, Wen Yau, (80j:20073)**
Simovici, Dan A. Posets and free semigroups. **(80c:06006)**
Tetruašvili, M. R. The problem of conjugacy for a class of groups and the complexity of computations. (Russian. Georgian and English summaries) **(80e:68125)**
Želeva, S. D. On the problem of isomorphism of a partially ordered semigroup. (Bulgarian. Russian and English summaries) **(80f:06017)**

20M07 Varieties of semigroups

Aizenštat, A. Ja. On varieties of semigroups having a finite number of subvarieties. **80k:20057**
Bales, J. L. On product varieties of inverse semigroups. **80k:20058**
Clifford, Alfred H. The free completely regular semigroup on a set. **80k:20082b**
Márki, L. Radical semisimple classes and varieties of semigroups with zero. **80k:20085**
Rasin, V. V. On the lattice of varieties of completely simple semigroups. **80e:20073**

Secondary classifications:

Poliák, G. A class of hereditarily finitely based varieties of semigroups. **(80j:08008a)**
On identities which define hereditarily finitely based varieties of semigroups. **(80j:08008b)**
Straubing, Howard Aperiodic homomorphisms and the concatenation product of recognizable sets. **(80k:68042)**

20M10 General structure theory

Allouch, Denis ★Sur les extentions de demi-groupes strictement reguliers. **80g:20067**
Filtre sur un monoïde fini. **80i:20031**
Anderson, James A. (*with* Kimura, Naoki) The tensor product of semilattices. **80a:20072**
(*with* Kimura, Naoki) Tensor product of commutative unions of groups. **80b:20072**
Baranskiĭ, V. A. Lattice isomorphisms of nilpotent semigroups. (Russian) **80a:20086**
Batbedat, André Le produit demi-direct pour les demi-groupes inverses. **80j:20057**

Blyth, Thomas S. Demi-groupes orthodoxes scindés. **80g:20068**
Bogdanović, Stojan (*with* Milić, Svetozar; Pavlović, Velimir) Anti-inverse semigroups. **80c:20086**
On anti-inverse semigroups. **80i:20032a**
See also **Milić, Svetozar. 80i:20032b**
Bredikhin, D. A. Definability of nilsemigroups by their bundles of correspondences. (Russian) **80m:20047**
Byleen, Karl (*with* Meakin, John; Pastijn, Francis) The fundamental four-spiral semigroup. **80c:20081**
Spirals of idempotents from *P*-semigroups. **80g:20069**
Chandran, V. R. (*with* Padmanabhan, R.) Cyclic identities and associativity. **80j:20058**
Chao, Chao Tzü A note on some regularities in semigroups. **80j:20059**
Clifford, Alfred H. The system of idempotents of a regular semigroup. **80g:20070**
Edwards, Constance C. A simplification of D'Alarcao's idempotent separating extensions of inverse semigroups. **80a:20074**
The minimum group congruence on an $\mathfrak{L}$-unipotent semigroup. **80h:20087**
The structure of $\mathfrak{L}$-unipotent semigroups. **80k:20059**
Feigenbaum, Ruth Regular semigroup congruences. **80h:20088**
Fortunatov, V. A. Perfect ideal extensions. (Russian) **80f:20065**
Fountain, John Adequate semigroups. **80j:20060**
Gagnon, F.-P. Monoids which can be reconstructed from the group of their invertible elements. **80i:20033**
Gale, David (*with* Tamura, Takayuki) Maximal cancellative subsemigroups and sub-Archimedeanness. **80i:20034**
Glushin, L. M. Dense extensions of commutative semigroups. **80j:20061**
Goralčík, P. (*with* Koubek, Václav) Translation extensions of semigroups. **80k:20060**
See also **Münzová-Demlová, Marie, 80k:20061**
Grassmann, H. On Schreier extension of finite semigroups. **80i:20035**
Grillet, Pierre Antoine On regular semigroups and their multiplication. **80f:20066**
Hall, T. E. Amalgamation and inverse and regular semigroups. **80d:20053**
(*with* Munn, W. D.) Semigroups satisfying minimal conditions. II. **80h:20089**
Hamilton, Howard Modularity of the congruence lattice of a commutative cancellative semigroup. **80e:20074**
Harinath, K. S. Some results on *k*-regular semigroups. **80j:20062**
Head, Tom Quotient monoids and greatest commutative monoid images of several types. **80h:20090**
Hotzel, Eckehart Maximal and minimal conditions in semigroups. **80g:20071**
Dual *D*-operands and the Rees theorem. **80h:20091**
On finiteness conditions in semigroups. **80j:20063**
Imaoka, Teruo The embedding of generalized inverse semigroup amalgams. **80c:20083a**
The embedding of generalized inverse semigroup amalgams. **80c:20083b**
Jones, P. R. Semimodular inverse semigroups. **80a:20075**
Distributive inverse semigroups. **80a:20076**
Kim, Jin Bai On circulant fuzzy matrices. **80h:20092**
Kim, Ki Hang (*with* Roush, Fred W.) The group-theoretic complexity of subsemigroups of Boolean matrices. **80b:20073**
(*with* Roush, Fred W.) On the $\mathfrak{D}$-class of a product. **80i:20036**
Kimura, Naoki *See* **Anderson, James A., 80a:20072** *and* **Anderson, James A., 80b:20072**
Knox, Nathaniel The inverse hull of the free semigroups on the set *X*. **80a:20077**
Kollár, János Interpolation property in semigroups. **80e:20075**
Koubek, Václav *See* **Goralčík, P., 80k:20060**
Kozlov, K. P. On the rigid cells of a subsemigroup of a semigroup. **80j:20064**
Krishnan, V. S. Quasiresolved semigroups and quintets. **80h:20093**
Krivenko, V. M. Semigroups in which every 2-generated subsemigroup is a transversal. (Russian) **80h:20094**
Kuroki, Nobuaki On intraregular semigroups. **80h:20095**
Lajos, Sándor Notes on regular semigroups. VII. **80j:20065**
Characterizations of completely regular elements in semigroups. **80a:20078**
On (m, n)-twin semigroups. **80b:20074**
Lesokhin, M. M. Approximation of semigroups with respect to predicates. II. (Russian) **80d:20054**
Lisovik, L. P. The identity problem for regular events over the direct product of a free and a cyclic semigroup. (Russian. English summary) **80i:20037**
Masat, Francis E. A generalization of right simple semigroups. **80g:20072**
A generalization of right simple semigroups. **80a:20079**
McAlister, D. B. *E*-unitary inverse semigroups over semilattices. **80b:20075**
Meakin, John The structure mappings of a regular semigroup. **80c:20084**
The structure mapping approach to regular and inverse semigroups. **80j:20066**
Structure mappings, coextensions and regular four-spiral semigroups. **80i:20038**
See also **Byleen, Karl; et al., 80c:20081**
Merlier, Thérèse Sur une généralisation des demi-groupes nilpotents. **80g:20073**
Mielke, Bruce W. On the lattice of completely-simple congruences on a Croisot-Teissier semigroup. **80e:20076**
Milić, Svetozar (*with* Bogdanović, Stojan) On a class of anti-inverse semigroups. **80i:20032b**
See also **Bogdanović, Stojan; et al., 80c:20086**
Mills, Janet E. The idempotents of a class of 0-simple inverse semigroups. **80i:20039**
Morel, Anne C. Locally cyclic semigroups. **80i:20040**
Munn, W. D. *See* **Hall, T. E., 80h:20089**
Münzová-Demlová, Marie On factorizations onto the bicyclic semigroup. **80c:20082**
On groups of units in a special class of monoids. **80a:20073**
(*with* Goralčík, P.) Translation constructions for monoids. **80k:20061**
Naeem, Khalid Computation of semidirect products of finite semigroups. **80h:20096a**
Computation of direct products of finite semigroups. **80h:20096b**
Nakajima, Sizuo Translational hull of a generalized Brandt semigroup. **80k:20062**
On the kernel of the wreath product of completely simple semigroups. **80h:20097**
Nambooripad, K. S. S. (*with* Rajan, A. R.) Structure of combinatorial regular semigroups. **80g:20074**
(*with* Sitaraman, Y.) Some congruences on regular semigroups. **80h:20098**
Novikov, B. V. Projective representations of semigroups. (Russian. English summary) **80e:20041**
Osondu, Kevin E. Semilattices of left reversible semigroups. **80b:20076**
Padmanabhan, R. *See* **Chandran, V. R., 80j:20058**
Pastijn, Francis Maximal subsemilattices of simple pseudo-inverse semigroups. **80f:20067**
See also **Byleen, Karl; et al., 80c:20081**
Pavlović, Velimir *See* **Bogdanović, Stojan; et al., 80c:20086**
Petrich, Mario Commutative semigroups. **80b:20077**
Congruences on inverse semigroups. **80d:20055**
Congruences on simple ω-semigroups. **80i:20042**
(*with* Reilly, N. R.) A representation of *E*-unitary inverse semigroups. **80j:20067**
Pondělíček, B. On semigroups having regular globals. **80j:20068**
Putcha, Mohan S. Subgroups of the power semigroup of a finite semigroup. **80i:20043**
Rajan, A. R. *See* **Nambooripad, K. S. S., 80g:20074**
Reilly, N. R. *See* **Petrich, Mario, 80j:20067**
Roush, Fred W. *See* **Kim, Ki Hang, 80b:20073** *and* **Kim, Ki Hang, 80i:20036**
Sasaki, Morio Commutative semigroups obtained by an abelian group and a generalized $\mathfrak{S}$-function. **80d:20056**
Satyanarayana, M. Correction to my paper: "Structure and ideal theory of commutative semigroups" [Czechoslovak Math. J. **28(103)** (1978), no. 2, 171–180; MR 58 #952]. **80i:20044**
Schützenberger, Marcel Paul A property of finitely generated submonoids of free monoids. **80i:20045**
Sharp, Jack C., Jr. Anti-regular semigroups. **80c:20085**
Shmuely, Zahava Idempotents in complete posemigroups. **80h:20099**
Sitaraman, Y. *See* **Nambooripad, K. S. S., 80h:20098**
Skornjakov, L. A. Regularity of the wreath product of monoids. **80e:20077**
Spoletini Cherubini, Alessandra (*with* Varisco, A.) Some properties of *E-m* semigroups. **80c:20087**
Steinfeld, Ottó On similarly decomposable semigroups. **80g:20075**
Sullivan, R. P. Partial translations of semigroups. **80h:20100**
Szendrei, Mária B. On the structure of orthodox semigroups. **80e:20078**
Takizawa, Kiyoshi *E*-unitary $\mathfrak{R}$-unipotent semigroups. **80j:20069**
Tamura, Takayuki Errata: "Notes on translational hulls of completely 0-simple semigroups" [Proceedings of the First Symposium on Semigroups (Shimane Univ., Matsue, 1977), pp. 73–83, Shimane Univ., Matsue, 1977; MR 57 #16438]. **80k:20063**
See also **Gale, David, 80i:20034**
Traore, Sekou An open problem on slender semigroups. **80f:20068**
Trotter, P. G. Normal partitions of idempotents of regular semigroups. **80e:20088**
Varisco, A. *See* **Spoletini Cherubini, Alessandra, 80c:20087**
Venkatesan, P. S. Primitive orthodox semigroups. **80h:20101**
Warne, R. J. Natural regular semigroups. **80j:20070**
Yamada, Miyuki Completely regular semigroups having certain properties. **80i:20046**
H-compatible orthodox semigroups. **80f:20069**

Secondary classifications:

Merlier, Thérèse Totally orderable semigroups and locally finite semigroups. **(80j:06018)**
Mitsch, H. Inverse semigroups and their natural order. **(80c:06022)**
Oehmke, Robert H. On right congruences of semigroups. **(80a:20068)**
Rao, N. Prabhakara Brouwerian semigroups. **(80e:06009)**
(Rédei, L.) *See* **Steinfeld, Ottó, (80e:16001)**
Schein, Boris M. Injective monars over inverse semigroups. **(80g:20082)**
Shmuely, Zahava The lattice of idempotent binary relations. **(80k:06009)**
Steinfeld, Ottó ★Quasi-ideals in rings and semigroups. **(80e:16001)**

20M11 Radical theory

Mannepalli, V. L. (*with* Nagore, C. Sri Hari) Generalized commutative semigroups. **80b:20078**
Nagore, C. Sri Hari *See* **Mannepalli, V. L., 80b:20078**
Roiz, E. N. (*with* Schein, Boris M.) Radicals of semigroups. **80c:20089**
Satyanarayana, M. Radical theory of semigroups. **80g:20076**
Schein, Boris M. *See* **Roiz, E. N., 80c:20089**
Tiščenko, A. V. Strongly semisimple semigroups with minimality conditions. (Russian) **80i:20047**
Semisimple semigroups with minimality conditions. (Russian) **80i:20048**

Secondary classifications:

Hamilton, Howard Congruences on $\mathfrak{R}$-semigroups. **(80a:20081)**
Wenger, Ronald H. Finite commutative semigroups having Frobenius semigroup algebras. **(80d:20060)**

20M12 Ideal theory

Dutta, T. K. *See* **Sen, M. K., 80g:20077**
Fabrici, Imrich A note on one-sided bases of semigroups. (Slovak and Russian summaries) **80m:20048**
Glushin, L. M. (*with* Steinfeld, Ottó) Rings (semigroups) containing minimal (0-minimal) right and left ideals. **80c:20090**
Jura, Andrzej Determining ideals of a given finite index in a finitely presented semigroup. **80d:20057**
Koubek, Václav *See* **Münzová-Demlová, Marie, 80k:20064**
Lajos, Sándor On the bi-ideal semigroup of a semigroup. **80b:20079**
(*with* Szász, G.) On characterizations of certain classes of semigroups. **80c:20091**
On generalized bi-ideals in semigroups. **80i:20049**
Molčanov, V. A. Dense ideal imbeddings of restrictive semigroups. (Russian) **80m:20049**
Münzová-Demlová, Marie (*with* Koubek, Václav) Subdirectly irreducible semigroups with minimal left and right ideals. **80k:20064**
Schwarz, Štefan Semigroups containing maximal ideals. (Russian summary) **80h:20102**

Sen, M. K. (*with* Dutta, T. K.) On some properties of generalized semi-ideals of a semigroup. **80g:20077**
Steinfeld, Ottó *See* **Gluskin, L. M., 80c:20090**
Szász, G. *See* **Lajos, Sándor, 80c:20091**

Secondary classifications:

Alrhan, Imrich $\mathfrak{I}$-subalgebras in unary algebras, prime ideals and $\mathfrak{I}$-ideals in groupoids and in semigroups. (Russian. English summary) **(80g:08010)**
Mannepalli, V. L. (*with* Nagore, C. Sri Hari) Generalized commutative semigroups. **(80b:20078)**
Nagore, C. Sri Hari *See* **Mannepalli, V. L., (80b:20078)**

20M14 Commutative semigroups

Anderson, James A. Tensor product of commutative semigroups. **80b:20080**
Barbedat, André Le langage des schémas pour les demi-groupes commutatifs. **80f:20070a**
Des schémas en demi-groupes commutatifs. **80f:20070b**
Hamilton, Howard (*with* Nordahl, Thomas) Semigroups whose lattice of congruences is Boolean. **80d:20058**
John, Chester C., Jr. A theorem on free envelopes. **80j:20071**
Kacunan, S. I. Commutative semigroups with self-dual lattice of subsemigroups. **80g:20078**
Mitrović, Žarko M. Contributions to the theory of interval arithmetic, and its applications. (Serbo-Croatian. English summary) **80e:20079**
Nordahl, Thomas *See* **Hamilton, Howard, 80d:20058**
Tamura, Takayuki Recent results and problems on commutative Archimedean semigroups. **80i:20050**

20M15 Mappings of semigroups

Ehrenfeucht, Andrzej (*with* Rozenberg, Grzegorz) Simplifications of homomorphisms. **80a:20080**
Hamilton, Howard Congruences on $\mathfrak{R}$-semigroups. **80a:20081**
Houghton, C. H. Anti-isomorphisms of completely 0-simple semigroups. **80k:20065**
Jones, P. R. Lattice isomorphisms of inverse semigroups. **80b:20081**
Libih, A. L. Local automorphisms of monogenic inverse semigroups. (Russian) **80k:20066**
Mitsch, H. Derivations and translations on l-semigroups. **80b:20082**
Rozenberg, Grzegorz *See* **Ehrenfeucht, Andrzej, 80a:20080**

Secondary classifications:

Hamilton, Howard (*with* Nordahl, Thomas) Semigroups whose lattice of congruences is Boolean. **(80d:20058)**
Nordahl, Thomas *See* **Hamilton, Howard, (80d:20058)**

20M20 Semigroups of transformations, etc. [See also 47D05, 47H20, 54H15.]

Ash, C. J. A uniform chain whose inverse semigroup has no chart. **80i:20051**
Borisov, A. A. Structural isomorphisms of semigroups of partial transformations. (Russian) **80c:20092a**
Structural isomorphisms of semigroups of complete transformations. (Russian) **80c:20092b**
Grassmann, H. On factor S-sets of monoids modulo submonoids. **80k:20067**
Howie, J. M. Idempotent generators in finite full transformation semigroups. **80a:20082**
Länger, Helmut Induced groupoids and induced semigroups. **80e:20080**
Lesohin, M. M. The local finiteness of semigroups of bilinear complex functionals. (Russian) **80a:20083**
Nelson, James, Jr. (*with* Putcha, Mohan S.) Word equations in a band of paths. **80i:20052**
Nico, William R. A classification of indecomposable S-sets. **80b:20083**
Nöbauer, Wilfried On semigroups and groups of local polynomial functions. **80k:20068**
Ponizovskiĭ, I. S. On the radical of the Burnside algebra of a finite inverse semigroup. **80i:20053**
Putcha, Mohan S. *See* **Nelson, James, Jr., 80i:20052**
Šarovova, T. N. Congruences on semigroups of linear operators. (Russian. English summary) **80d:20059**
Schein, Boris M. Projection partitions of function semigroups. **80b:20084**
Serafin, S. On maximal subgroups in semigroups of partial transformations. **80k:20069**
Sullivan, R. P. Ideals in transformation semigroups. **80g:20079**
Tirasupa, Yupaporn Factorizable transformation semigroups. **80j:20072**
Todorov, Kaltscho Die $\mathfrak{P}$-Klassen der endlichen symmetrischen Halbgruppen und ihre Mächtigkeiten. **80e:20081**
Inverse elements and their average number in a finite symmetric semigroup. **80m:20050**

Secondary classifications:

Curtain, Ruth F. A semigroup approach to the LQG problem for infinite-dimensional systems. **(80a:93013)**
Kastl, Jan Innere Translationen der kleinen Kategorien. (Russian and English summaries) **(80i:18009)**
Nakajima, Sizuo Translational hull of a generalized Brandt semigroup. **(80k:20062)**
Tzeng, Fu Chien On semigroups of endomorphisms of biregular algebras. **(80e:17007)**
Večtomov, E. M. An isomorphism of the multiplicative semigroups of algebras of continuous functions with compact support. (Russian) **(80d:54013)**

20M25 Semigroup rings, multiplicative semigroups of rings

Jones, Patricia (*with* Ligh, Steve) Quasi ring-semigroups. **80e:20082**
Lee, Sin Min A condition for a semigroup ring to be local. **80g:20080**
Ligh, Steve *See* **Jones, Patricia, 80e:20082**
Matsuda, Ryûki Torsion-free abelian semigroup rings. V. **80g:20081**
Rukolaine, A. V. The center of the semigroup algebra of a finite inverse semigroup over the field of complex numbers. (Russian) **80b:20085**
Tarasov, B. V. Some semigroup rings with zero divisors. (Russian) **80k:20070**
Wenger, Ronald H. Finite commutative semigroups having Frobenius semigroup algebras. **80d:20060**

Secondary classifications:

Chao, Chao Tzŭ A note on some regularities in semigroups. **(80j:20059)**
Gluskin, L. M. (*with* Steinfeld, Ottó) Rings (semigroups) containing minimal (0-minimal) right and left ideals. **(80c:20090)**
Steinfeld, Ottó *See* **Gluskin, L. M., (80c:20090)**
Tarasov, B. V. Subalgebras of a free associative algebra. (Russian) **(80k:16005)**

20M30 Representation of semigroups

Babai, László Endomorphisms of sub- and factorsemigroups. **80m:20051**
Bredikhin, D. A. (*with* Schein, Boris M.) Representations of ordered semigroups and lattices by binary relations. **80c:20093**
Groze, Victoria *See* **Vasiu, Angela; et al., 80a:20085**
Hall, T. E. Representation extension and amalgamation for semigroups. **80a:20084**
Lau, August Y. W. Finite abelian semigroups represented into the power set of finite groups. **80f:20071**
Orbán, B. *See* **Vasiu, Angela; et al., 80a:20085**
Pastijn, Francis The Schützenberger groups of a semigroup and of its subsemigroups. (Serbo-Croatian summary) **80c:20094**
Preston, Gordon B. The construction of semigroups from groups and semilattices. **80d:20061**
Schein, Boris M. *See* **Bredikhin, D. A., 80c:20093**
Trnková, V. Isomorphism of products and representation of commutative semigroups. **80i:20054**
Vasiu, Angela (*with* Groze, Victoria; Orbán, B.) Characterisation of the S-groups. **80a:20085**

Secondary classifications:

Adámek, Jiří (*with* Koubek, Václav) On representations of ordered commutative semigroups. **(80h:06012)**
Broline, Duane M. Frieze patterns as matrix multiplication tables. **(80i:05022)**
Koubek, Václav *See* **Adámek, Jiří, (80h:06012)**
Perrot, J.-F. Variétés de langages et opérations. (English summary) **(80a:68090)**

20M35 Semigroups in automata theory, linguistics, etc. [See also 03D05, 68D30, 68Fxx.]

Bavel, Zamir *See* **Edwards, William R., 80i:20055**
Cochet, Yves Langages définis par des congruences. **80d:20062**
Edwards, William R. (*with* Bavel, Zamir) The left-discrimination sequence of an automaton. **80i:20055**
Hsieh, Wen Yau (*with* Shih, Hui Jan) Left cancellative elements in the monoid of languages. **80j:20073**
Jürgensen, H. Some applications of the theory of semigroups to automata. **80a:20086**
Lassez, J.-L. (*with* Shih, Hui Jan) Factorization in the monoid of languages. **80d:20063**
Lin, Kuang Nan (*with* Shih, Hui Jan) Disjunctive pairs and related languages on a free monoid. **80i:20056**
Moszner, Zenon Sur l'inégalité de translation. **80j:20074**
Perrin, Dominique Séries formelles et combinatoires dans le monoïde libre. **80e:20083**
Perrot, J.-F. On regular semigroups, finite automata and prefix codes. **80m:20052**
Pin, J.-E. Sur le monoïde syntactique de L^* lorsque L est un langage fini. (English summary) **80b:20086**
Reis, C. M. (*with* Shih, Hui Jan) Some properties of disjunctive languages on a free monoid. **80d:20064**
Restivo, Antonio Some decision results for recognizable sets in arbitrary monoids. **80f:20072**
Sur les sous-monoïdes très purs. **80d:20065**
Reutenauer, Christophe Une topologie du monoïde libre. **80j:20075**
Schwarz, Štefan A theorem on binary relations and infinite regular languages. **80i:20057**
Shih, Hui Jan *See* **Lassez, J.-L., 80d:20063; Reis, C. M., 80d:20064; Lin, Kuang Nan, 80i:20056** *and* **Hsieh, Wen Yau, 80j:20073**
Volkov, G. K. Combinatorial complexity of finite semigroups. (Russian) **80b:20087**

Secondary classifications:

Beyga, Lech Some remarks on the transformations, groups of automorphisms, and characteristic semigroups of permutation controllable automata. **(80c:68037)**
Cummings, L. J. On the construction of Thue sequences. **(80j:05013)**
Eichner, L. The semigroups of totally linearly realizable automata. **(80k:68040)**
Lisovik, L. P. Finite coverings of regular events by rigid sets. (Russian. English summary) **(80f:68068)**
Perrin, Dominique Codes asynchrones. **(80d:94026)**
Perrot, J.-F. Introduction aux monoïdes syntactiques des langages algébriques. **(80c:68192)**
Sommerhalder, R. The endomorphism monoid of a non-cyclic automaton. (Russian summary) **(80c:68047)**
Straubing, Howard Families of recognizable sets corresponding to certain varieties of finite monoids. **(80k:68046)**

20M50 Connections with homological algebra and category theory

Schein, Boris M. Injective monars over inverse semigroups. **80g:20082**

20M99 None of the above, but in this section

Putcha, Mohan S. Quadratic semigroups on affine spaces. **80g:20083**

Secondary classifications:

Baird, Bridget B. (*with* Magill, K. D., Jr.) Green's $\mathfrak{R}$-relation and climbing mountains. **(80m:22003)**
Delanghe, R. (*with* Impens, C.) N-semigroups as codomain of measures. **(80h:28014)**
Dimovski, Dončo Additive semigroups of integers. (Macedonian. English summary) **(80m:10008)**
Impens, C. *See* **Delanghe, R., (80h:28014)**
Magill, K. D., Jr. *See* **Baird, Bridget B., (80m:22003)**
Satyanarayana, M. ★Positively ordered semigroups. **(80l:06011)**
Schweigert, D. On semigroups of polynomial functions. **(80j:08002)**
Sizer, Walter S. Group retractions induced by a total order. **(80j:06019)**

20Nxx Other generalizations of groups

20N05 Loops, quasigroups [See also 05Bxx.]

Ajmal, Naseem A generalization of Bol loops. **80e:20084**
Basarab, A. S. (*with* Belioglo, A. I.) Universal-automorphic-inverse G-loops. (Russian) **80h:20103a**
(*with* Belioglo, A. I.) UAI Osborn loops. (Russian) **80h:20103b**
Belioglo, A. I. *See* **Basarab, A. S., 80h:20103a** *and* **Basarab, A. S., 80h:20103b**
Beljavskaja, G. B. Construction of (n^2-2)-orthogonal quasigroups of even order n, where $n-1 \neq 0 \pmod 3$. (Russian) **80m:20053**
Bennett, Frank E. (*with* Mendelsohn, N. S.) Constructions of totally symmetric quasigroups containing a specified number of idempotents. **80h:20104**
Bruck, R. H. (*with* Leong, F.) Schur's splitting theorems for Moufang loops. **80j:20076**
Cardoso, Jayme Machado (*with* Pereira da Silva, Clóvis) On Ward quasigroups. **80e:20085**
Galkin, V. M. Finite distributive quasigroups. (Russian) **80b:20088**
Gatial, Ján Die Schwerpunkte der Dreiecke in einigen endlichen Quasigruppen. (Russian and English summaries) **80a:20087**
Gorinčoi, P. V. A free loop of a variety of 2-nilpotent totally symmetric loops. (Russian) **80k:20071**
Some properties of hypernilpotent TS-loops. (Russian) **80m:20054**
Gvaramija, A. A. Reducible partial balanced identities of the second kind and of lengths two and three in quasigroups. (Russian. Georgian and English summaries) **80b:20089**
Irreducible partial balanced identities of the second kind of length 3 on quasigroups. (Russian. Georgian and English summaries) **80b:20090**
A B_3-loop with the property of isotopy and isomorphism. (Russian. Georgian and English summaries) **80g:20084**
Ježek, Jaroslav (*with* Kepka, Tomáš; Němec, Petr) The category of totally symmetric quasigroups is binding. (Russian and Czech summaries) **80b:20091**
(*with* Kepka, Tomáš) Varieties of quasigroups determined by short strictly balanced identities. **80b:20092**
Kepka, Tomáš A note on simple quasigroups. (Russian and Czech summaries) **80b:20093**
A note on WA-quasigroups. (Russian and Czech summaries) **80b:20094**
Notes on quasimodules. **80h:20105a**
(*with* Němec, Petr) Quasimodules generated by three elements. **80h:20105b**
F-quasigroups isotopic to Moufang loops. **80b:20095**
See also **Ježek, Jaroslav; et al., 80b:20091** *and* **Ježek, Jaroslav, 80b:20092**
Leong, F. *See* **Bruck, R. H., 80j:20076**
Malbos, Jean-Pierre Sur la classe de nilpotence des boucles commutatives de Moufang et des espaces médiaux. (English summary) **80a:20088**
Mendelsohn, N. S. *See* **Bennett, Frank E., 80h:20104**
Němec, Petr *See* **Ježek, Jaroslav; et al., 80b:20091** *and* **Kepka, Tomáš, 80h:20105b**
Pereira da Silva, Clóvis On a theorem of Lagrange for Ward quasigroups. (Portuguese) **80h:20107**
See also **Cardoso, Jayme Machado, 80e:20085**
Quackenbush, Robert W. Sheffer quasigroups. **80h:20106**
Robinson, D. A. A loop-theoretic study of right-sided quasigroups. **80k:20072**
Russu, A. F. Varieties generated by a finite commutative Moufang loop. (Russian) **80j:20077**
Sandu, N. I. Complex associators of a commutative Moufang loop. (Russian) **80l:20058a**
Centrally nilpotent commutative Moufang loops. (Russian) **80l:20058b**
Smith, J. D. H. Finite equationally complete entropic quasigroups. **80e:20086**
Ştefănescu, Mirela A correspondence between the class of left nonassociative near-rings and a class of quasigroups. **80b:20096**
A correspondence between a class of neorings and a class of loops. (Romanian summary) **80j:20078**
Taylor, M. A. A generalization of a theorem of Belousov. **80j:20079**
Ušan, Janez k-seminets. **80k:20073**
(Valucè, I. I.) *See* **Quasigroups and loops, 80e:20087**
Vaughan-Lee, M. R. Laws in finite loops. **80l:20059**
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Secondary classifications:

Baker, Ronald D. Quasigroups and tactical systems. **(80d:05018)**
Belousov, V. D. A class of algebraic nets. (Russian) **(80l:51011)**
Golovko, I. A. Fano configurations in k-nets. (Russian) **(80h:51010)**
Hoffman, D. G. On conjugate invariant subgroups of n-quasigroups. **(80e:05030)**
Kepka, Tomáš (*with* Němec, Petr) Quasigroups whose regular mappings are automorphisms. **(80j:20051)**
(*with* Němec, Petr) Notes on distributive groupoids. **(80j:20052)**
Distributive division groupoids. **(80j:20053)**
Markvartová, Jitka On improper collineations of k-nets. (Czech. English and Russian summaries) **(80a:05053)**
Mendelsohn, N. S. A class of combinatorial quasigroups. **(80b:05018)**
Němec, Petr *See* **Kepka, Tomáš, (80j:20051)** *and* **Kepka, Tomáš, (80j:20052)**
Tararin, V. M. Ordered quasigroups. (Russian) **(80l:06014)**
Želeva, S. D. Representation of partially right-ordered semigroups that are defined by inequalities. (Bulgarian. Russian and English summaries) **(80l:06015)**

20N07 Mappings of loops

Ştefănescu, Mirela Correspondence between the class of left nonassociative C-rings and a class of loops. (Italian summary) **80h:20108**

20N10 Ternary systems (heaps, semiheaps, heapoids, etc.)

Adhikary, D. N. *See* **Kishore, Nand, 80a:20089**
Feizullaev, R. B. *See* **Mustafaev, L. G., 80g:20086**
Havel, Václav (*with* Studnička, Ivan) Ternärringe ohne Planaritätsbedingung. (Czech, Russian and English summaries) **80d:20066**
Kishore, Nand (*with* Adhikary, D. N.) Dependence of associativity conditions for ternary operations. **80a:20089**
Konstantinova, L. I. Semiheap bundles. (Russian) **80m:20055**
Krjovski, P. On semilattice decompositions of ternary semigroups. (Macedonian summary) **80g:20085**
Mustafaev, L. G. (*with* Feizullaev, R. B.) A semiheap of locally topological mappings. (Russian) **80g:20086**
Nieminen, Juhani The ideal structure of simple ternary algebras. **80c:20095**
Studnička, Ivan *See* **Havel, Václav, 80d:20066**

Secondary classifications:

Hedliková, Jarmila Chains in modular ternary latticoids. (Russian summary) **(80g:06006)**
Salzmann, Helmut Automorphismengruppen 8-dimensionaler Ternärkörper. **(80i:51004)**

20N15 n-ary systems

Beljavskaja, G. B. (*with* Murathudjaev, S.) About admissibility of N-ary quasigroups. **80g:20087**
Borisenko, V. V. Irreducible n-quasigroups on finite sets of composite order. (Russian) **80h:20109**
Celakoski, Naum On some axiom systems for n-groups. (Macedonian summary) **80m:20056**
Csima, J. Embedding partial idempotent d-ary quasigroups. **80e:20088**
Kolesnikov, O. V. Expansion of n-groups. (Russian) **80i:20060**
Lee, Sin Min On a simple extension of n-groupoids. **80m:20057**
McLeish, Mary On the number of conjugates of n-ary quasigroups. **80h:20110**
Murathudjaev, S. *See* **Beljavskaja, G. B., 80g:20087**
Wanke-Jakubowska, M. B. (*with* Wanke-Jerie, M. E.) On orders of skew elements in finite n-groups. **80h:20111**
Wanke-Jerie, M. E. *See* **Wanke-Jakubowska, M. B., 80h:20111**

Secondary classifications:

Batbedat, André Spectres des algèbres à produit. (English summary) **(80e:08001)**
Henno, Jaak On idempotents and Green relations in the algebras of many-placed functions. **(80h:08005)**
Niyogi, Sila On some special type of mappings of formal power series ring. **(80h:16003a)**
Schein, Boris M. (*with* Trohimenko, Valentin S.) Algebras of multiplace functions. **(80e:08002)**
Trohimenko, Valentin S. *See* **Schein, Boris M., (80e:08002)**
de Vito, Paola (*with* Zirilli, Francesco) Normal elliptic curves and C^{n+1}-systems. (Italian) **(80d:14019)**
Zirilli, Francesco *See* **de Vito, Paola, (80d:14019)**

20N99 None of the above, but in this section

Belousov, V. D. ★Конфигурации в алгебраических сетях. (Russian) [Configurations in algebraic nets] **80k:20074**
Kazim, M. A. (*with* Naseeruddin, Md.) On almost semigroups. **80j:20080**
Naseeruddin, Md. *See* **Kazim, M. A., 80j:20080**
Pavlović, Velimir The Moufang functional equation $B_1(x, B_2(y, B_3(x, z))) = B_4(B_5(B_6(x, y), x), z)$ on GD-groupoids. **80h:20112**

Secondary classifications:

Harrison, D. K. Double coset and orbit spaces. **(80j:51010)**
Maurer, I. Gy. Observations concernant les Ω-groupes distributifs et cycliques. **(80a:08006)**
Vagner, V. V. Introrestrictive factored and bifactored ordered sets. (Russian) **(80i:06008)**

20P05 Probability methods in group theory

Mays, Michael E. Counting abelian, nilpotent, solvable, and supersolvable group orders. **80g:20088**

22-XX TOPOLOGICAL GROUPS, LIE GROUPS {For transformation groups, see 54H15, 57Sxx, 58-XX. For abstract harmonic analysis, see 43-XX.}

22-01 Elementary exposition, textbooks

Kirillov, A. A. ★Элементы теории представлений. (Russian) [Elements of the theory of representations] **80b:22001**
Pontrjagin, L. S. ★Continuous groups. (Spanish) **80c:22001**
(Vega, Carlos) *See* **Pontrjagin, L. S., 80c:22001**

Secondary classifications:

Dieudonné, Jean ★Grundzüge der modernen Analysis. Vol. 5/6. **(80f:43001)**
Page, Warren ★Topological uniform structures. **(80c:46001)**

22-02 Advanced exposition (research surveys, monographs, etc.)

Mackey, George W. ★Unitary group representations in physics, probability, and number theory. **80i:22001**

Secondary classifications:

(Hochnke, H.-J.) *See* **Zaicev, G. A., (80k:81002)**
Zaicev, G. A. ★Algebraische Probleme der mathematischen und theoretischen Physik. **(80k:81002)**

22-03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Mackey, George W. Harmonic analysis as the exploitation of symmetry—a historical survey. **(80j:01019)**
Weil, André ★Oeuvres scientifiques. Collected papers. Vol. I (1926–1951). **(80k:01067a)**
Bibliography:
Weil, André *See* **Weil, André, (80k:01067a)**

22-04 Explicit machine computation and programs (not the theory of computation or programming)

22-06 Proceedings, conferences, etc.

(Carmona, Jacques) *See* **Non-commutative harmonic analysis, 80g:22001**
(Vergne, Michèle) *See* **Non-commutative harmonic analysis, 80g:22001**
Colloquium:
Non-Commutative Harmonic Analysis *See* **Non-commutative harmonic analysis, 80g:22001**
Harmonic analysis *See* **Non-commutative harmonic analysis, 80g:22001**
Marseille-Luminy *See* **Non-commutative harmonic analysis, 80g:22001**
Non-commutative harmonic analysis ★Noncommutative harmonic analysis. **80g:22001**

Secondary classifications:

(Beiglböck, Wolf) *See* **Group theoretical methods in physics, (80i:81002)**
(Böhm, Arno) *See* **Group theoretical methods in physics, (80i:81002)**
(Borel, Armand) *See* **Automorphic forms, representations and *L*-functions, (80g:10002a) *and* Automorphic forms, representations and *L*-functions, (80g:10002b)**
(Casselman, W.) *See* **Automorphic forms, representations and *L*-functions, (80g:10002a) *and* Automorphic forms, representations and *L*-functions, (80g:10002b)**
(Faddeĭ, V. I.) *See* **Group theoretic methods in mathematical physics, (80d:00010)**
(de la Harpe, Pierre) *See* **Algèbres d'opérateurs, (80g:46002)**
(Mitropol'skiĭ, Ju. O.) *See* **Group theoretic methods in mathematical physics, (80d:00010)**
(Takasugi, Eiichi) *See* **Group theoretical methods in physics, (80i:81002)**
(Wall, C. T. C.) *See* **Homological group theory, (80m:20001)**
Algebra *See* **American Mathematical Society Translations, Ser. 2, (80m:00006)**
Algèbres d'opérateurs ★Algèbres d'opérateurs. **(80g:46002)**
American Mathematical Society Translations, Ser. 2 ★Twelve papers in logic and algebra. **(80m:00006)**
Austin, Tex. *See* **Group theoretical methods in physics, (80i:81002)**
Automorphic forms, representations and *L*-functions ★Automorphic forms, representations and *L*-functions. Part 1. **(80g:10002a)**
★Automorphic forms, representations, and *L*-functions. Part 2. **(80g:10002b)**
Colloquium:
Group Theoretical Methods in Physics *See* **Group theoretical methods in physics, (80i:81002)**
Group Theory *See* **Group theoretical methods in physics, (80i:81002)**
Conference:
Group Theory and Mathematical Physics *See* **Group theoretical methods in physics, (80i:81002)**
Corvallis, Ore. *See* **Automorphic forms, representations and *L*-functions, (80g:10002a) *and* Automorphic forms, representations and *L*-functions, (80g:10002b)**
Durham *See* **Homological group theory, (80m:20001)**
Group theoretic methods in mathematical physics ★Теоретико-групповые методы в математической физике. (Russian) [Group-theoretic methods in mathematical physics] **(80d:00010)**
Group theoretical methods in physics ★Group theoretical methods in physics. **(80i:81002)**
Group theory *See* **Homological group theory, (80m:20001)**
Homological group theory ★Homological group theory. **(80m:20001)**
***L*-functions** *See* **Automorphic forms, representations and *L*-functions, (80g:10002a) *and* Automorphic forms, representations and *L*-functions, (80g:10002b)**
Logic *See* **American Mathematical Society Translations, Ser. 2, (80m:00006)**
Mathematical physics *See* **Group theoretical methods in physics, (80i:81002)**
Operator algebras *See* **Algèbres d'opérateurs, (80g:46002)**
Plans-sur-Bex *See* **Algèbres d'opérateurs, (80g:46002)**
Proceedings of Symposia in Pure Mathematics *See* **Automorphic forms, representations and *L*-functions, (80g:10002a) *and* Automorphic forms, representations and *L*-functions, (80g:10002b)**
Séminaire:
Algèbres d'Opérateurs *See* **Algèbres d'opérateurs, (80g:46002)**
Summer Research Institute:
American Mathematical Society *See* **Automorphic forms, representations and *L*-functions, (80g:10002a) *and* Automorphic forms, representations and *L*-functions, (80g:10002b)**
Symposium:
Homological and Combinatorial Techniques in Group Theory *See* **Homological group theory, (80m:20001)**

22Axx Topological algebraic systems {For topological rings and fields, see 12Jxx, 13Jxx, 16A80; for dual spaces of operator algebras and topological groups, see 47D35.}

22A05 Structure of general topological groups

Bel'nov, V. K. Some theorems on metrizable abelian groups. (Russian) **80d:22001**
Topologization of abelian groups. (Russian. English summary) **80i:22002**
Bryant, Roger M. A question concerning *CZ*-groups. **80i:22003**
Dergačev, V. M. Topological vector groups. (Russian) **80b:22002**
Fay, Temple H. (*with* Ordman, Edward T.; Thomas, Barbara V. Smith) The free topological group over the rationals. **80e:22001**
Huang, Ter Jenq A characterization of maximally almost periodic groups. **80h:22001**
Ordman, Edward T. *See* **Fay, Temple H.; et al., 80e:22001**
Protasov, I. V. Dualisms of topological abelian groups. (Russian) **80e:22002**
Saryev, A. A topology in the lattice of subgroups of a topological group. (Russian. Turkmen and English summaries) **80m:22001**
Schwanengel, Ulrich An example of a *Q*-minimal precompact topological group containing a nonminimal closed normal subgroup. **80h:22002**
Talmanov, A. D. Topologizable groups. II. (Russian) **80a:22001**
Thomas, Barbara V. Smith On the coproduct of the topological groups Q and Z_2. **80k:22001**
See also **Fay, Temple H.; et al., 80e:22001**
Ušakov, V. I. Algebraically compact groups. (Russian) **80a:22002**

Secondary classifications:

Higgins, C. A. Some structure theorems for CZ-groups. **(80k:20031)**
Kümmich, Frieder Quasinormalität in topologischen Gruppen. (English summary) **(80i:22013)**
Muhin, Ju. N. Subgroup lattices of connected groups. (Russian) **(80i:22015)**
Protasov, I. V. On the lattice of subgroups of a profinite group. (Russian. English summary) **(80f:20029)**
Segal, Daniel Congruence topologies in commutative rings. **(80j:13018)**

22A10 Analysis on general topological groups

Cattaneo, U. Locally continuous multipliers for topological vector groups. **80c:22002**
Sakai, Kôkichi On quasipositive definite functions and unitary representations of groups in Pontrjagin spaces. **80i:22004**

Secondary classifications:

Volk, Günter Grundfunktionen und verallgemeinerte Funktionen auf topologischen Gruppen. III. **(80g:46035)**
de Vries, J. The local weight of an effective locally compact transformation group and the dimension of $L^2(G)$. **(80b:54049)**
Zerling, David On the existence of dense analytic subgroups. **(80i:22023)**

22A15 Structure of topological semigroups

(Baker, J. W.) *See* **Pym, John, 80d:22002**
Chow, H. L. On topologically simple semigroups. **80i:22005**
Farley, Reuben W. Constructions of positive commutative semigroups on the plane. **80k:22002**
Friedberg, Michael Compactifications of finite-dimensional cones. **80b:22003**
Grošek, Otokar The topology on semigroups that is induced by an endomorphism. (Russian. English summary) **80m:22002**
Hu, Hung Tzaw Semigroups on *D*-spaces. **80i:22006**
(Milnes, P.) *See* **Pym, John, 80d:22002**
Numakura, Katsumi Closedness of φ-ideals in a compact and totally disconnected semigroup. **80i:22007**
Poguntke, Detlev Well-bounded semigroups in connected groups. **80a:22003**
Pym, John Footnote to a paper of J. W. Baker and P. Milnes: "The ideal structure of the Stone-Čech compactification of a group" (Math. Proc. Cambridge Philos. Soc. 82 (1977), no. 3, 401–409). **80d:22002**
Sigmon, Kermit On when a topologically simple semigroup is simple. **80b:22004**
Skrjago, A. M. On compact regular semigroups of complex matrices. **80a:22004**

Secondary classifications:

Crawley, Winston Epimorphisms and $\mathfrak{K}$-coextensions. **(80g:18009)**

22A20 Analysis on topological semigroups

Baird, Bridget B. (*with* Magill, K. D., Jr.) Green's $\mathfrak{R}$-relation and climbing mountains. **80m:22003**
Berglund, J. F. (*with* Junghenn, H. D.; Milnes, P.) ★Compact right topological semigroups and generalizations of almost periodicity. **80c:22003**
Junghenn, H. D. *See* **Berglund, J. F.; et al., 80c:22003**
Losert, Viktor (*with* Rindler, Harald) Uniform distribution and the mean ergodic theorem. **80f:22001**
Magill, K. D., Jr. *See* **Baird, Bridget B., 80m:22003**
Milnes, P. *See* **Berglund, J. F.; et al., 80c:22003**
Rindler, Harald *See* **Losert, Viktor, 80f:22001**
Székely, Gábor Algebraic dimension of semigroups with application to invariant measures. **80i:22008**

Secondary classifications:

Goldberg, Seymour (*with* Irwin, Paul) Weakly almost periodic vector-valued functions. **(80e:43010)**
Irwin, Paul *See* **Goldberg, Seymour, (80e:43010)**
Junghenn, H. D. Almost periodic functions on semidirect products of transformation semigroups. **(80i:54048)**
Kharaghani, H. The evolution of bounded linear functionals with application to invariant means. **(80e:43004)**
Ng, Kung Fu Invariant measures for compact affine semi-groups. **(80b:28014)**
Sleijpen, Gérard L. G. *L*-multipliers for foundation semigroups with identity element. **(80i:43003)**

22A25 Representations of general topological groups and semigroups

Seda, Anthony Karel Quelques résultats dans la catégorie des groupoïdes d'opérateurs. (English summary) **80b:22005**
Sen, R. N. Bundle representations and their applications. **80e:22003**
Viswanath, K. Quaternionic representations of topological groups. **80b:22003**

Secondary classifications:

Cattaneo, U. Locally continuous multipliers for topological vector groups. **(80c:22002)**
Sakai, Kôkichi On quasipositive definite functions and unitary representations of groups in Pontrjagin spaces. **(80i:22004)**

22A26 Topological semilattices, lattices and applications [See also 06B30, 06F30.]

Stralka, Albert Quotients of products of compact chains. **80b:22004**

Secondary classifications:

Hofmann, Karl Heinrich (*with* Lawson, Jimmie D.) The spectral theory of distributive continuous lattices. **(80c:54045)**
Lawson, Jimmie D. *See* **Hofmann, Karl Heinrich, (80c:54045)**
Liber, S. A. Free compact lattices. (Russian) **(80c:06014)**

22A30 Other topological algebraic systems and their representations

Aye, Sein *See* **Lee, Sin Min, 80i:22010**
Barnhardt, J. Distributive groupoids and biassociativity. **80i:22009**
Burdujan, Ilie Groupes de transformations dans la théorie des quasigroupes. **80c:22004**
Lee, Sin Min (*with* Aye, Sein) On groupoids which admit only discrete topologies. **80i:22010**
Strambach, Karl Homotopieklassen idempotenter Multiplikationen. **80b:22006**

Secondary classifications:

Pčeničnov, V. I. The structure of lattice-ordered groups with a topology. (Russian) **(80m:06018)**

22A99 None of the above, but in this section

Bicknell, Kevin (*with* Morris, Sidney A.) Norms on free topological groups. **80b:22007**
Mackenzie, K. A. Rigid cohomology of topological groupoids. **80i:22011**
Morris, Sidney A. *See* **Bicknell, Kevin, 80b:22007**
Taylor, Walter Primal topological algebras. **80e:22004**

Secondary classifications:

Enflo, P. On infinite-dimensional topological groups. **(80b:58009)**
Foster, David H. Fuzzy topological groups. **(80f:54004)**

22Bxx Locally compact abelian (LCA) groups

22B05 General properties and structure of LCA groups

Bel'nov, V. K. Retracts in different classes of topological abelian groups. (Russian. English summary) **80c:22005**
Flor, Peter Eine Bemerkung über lokalkompakte abelsche Gruppen. **80b:22008**
Surmanidze, O. È. Direct decompositions of locally compact abelian groups. (Russian. Georgian and English summaries) **80a:22005**

Secondary classifications:

Bose, Ramendra Krishna Realizability theory of continuous linear operators on groups. **(80h:46061)**
Herrmann, Horst (*with* Kerstan, Johannes; Liese, Friedrich) *o*-stetige Masse und asymptotische Gleichverteilung. **(80m:60015)**
Kerstan, Johannes *See* **Herrmann, Horst; et al., (80m:60015)**
Liese, Friedrich *See* **Herrmann, Horst; et al., (80m:60015)**
Losert, Viktor On the existence of uniformly distributed sequences in compact topological spaces. I. **(80f:10062a)**
On the existence of uniformly distributed sequeness in compact topological spaces. II. **(80f:10062b)**

22B10 Structure of group algebras of LCA groups

22B99 None of the above, but in this section

Muhin, Ju. N. (*with* Protasov, Ĭ. V.) Projections of topological abelian groups. (Russian) **80c:22006**
Protasov, Ĭ. V. *See* **Muhin, Ju. N., 80c:22006**

Secondary classifications:

Grandet-Hugot, Marthe Quelques notions sur l'équirépartition dans les groupes abéliens compacts et localement compacts. **(80m:10037)**
Long, Rui Lin The weighted large sieve inequalities on locally compact abelian groups. **(80f:10057)**

22C05 Compact groups

Djoković, Dragomir Ž. (*with* Malzan, Jerry) Products of reflections in the unitary group. **80d:22003**
Fässler, A. (*with* Schwarzenbach, H.) Symmetriegerechte Polynome von Punktgruppen. (English summary) **80h:22005**
Malzan, Jerry *See* **Djoković, Dragomir Ž., 80d:22003**
Miles, G. (*with* Thomas, R. K.) The breakdown of automorphisms of compact topological groups. **80c:22007**
Schwarzenbach, H. *See* **Fässler, A., 80h:22005**
Thomas, R. K. *See* **Miles, G., 80c:22007**

Secondary classifications:

Brown, Robert F. A homological characterization of inner automorphisms of compact Lie groups. **(80a:57021)**

22Dxx Locally compact groups and their algebras

22D05 General properties and structure of locally compact groups

Boseck, H. (*with* Czichowski, G.) Connectedness properties of locally compact groups. **80i:22012**
Čarin, V. S. *See* **Protasov, Ĭ. V., 80a:22006**
Czichowski, G. *See* **Boseck, H., 80i:22012**
Hofmann, Karl Heinrich (*with* Mukherjea, Arunava) On the density of the image of the exponential function. **80c:22008**
Kümmich, Frieder Quasinormalität in topologischen Gruppen. (English summary) **80i:22013**
Maxones, Walter (*with* Rindler, Harald) Asymptotisch gleichverteilte Massfolgen in Gruppen vom Heisenberg-Typ. **80e:22005**
Mocanu, Constanta A generalization of the invariant of H. Leptin. (Romanian. English summary) **80i:22014**
Muhin, Ju. N. (*with* Staruhina, E. N.) Two conditions for discreteness in topological groups. (Russian) **80m:22004**
Subgroup lattices of connected groups. (Russian) **80i:22015**
Mukherjea, Arunava *See* **Hofmann, Karl Heinrich, 80c:22008**
Protasov, Ĭ. V. Local theorems in the theory of topological groups. (Russian) **80c:22009**
(*with* Čarin, V. S.) Projections of topological groups. (Russian) **80a:22006**
Projection of zero-dimensional nilpotent groups. (Russian) **80d:22004**
Topological groups with a compact lattice of closed subgroups. (Russian) **80i:22016**
Rindler, Harald *See* **Maxones, Walter, 80e:22005**
Staruhina, E. N. *See* **Muhin, Ju. N., 80m:22004**
Wang, S. P. On *L*-subgroups of locally compact groups. **80e:22006**
Yoon, Jaihan On semidirect factors of a locally compact group. **80e:22007**

Secondary classifications:

Bondar, J. V. *See* **Milnes, P., (80d:43003)**
Goto, Morikuni Semi-algebraic groups and the local closure of an orbit in a homogeneous space. **(80b:57035)**
Milnes, P. (*with* Bondar, J. V.) A simple proof of a covering property of locally compact groups. **(80d:43003)**
Saryev, A. A topology in the lattice of subgroups of a topological group. (Russian. Turkmen and English summaries) **(80m:22001)**
Takeuti, Gaisi A transfer principle in harmonic analysis. **(80b:03077)**

22D10 Unitary representations of locally compact groups

Alesina, Alberto Equivalence of norms for coefficients of unitary group representations. **80e:22008**

Arsac, Gilbert Opérateurs compacts dans l'espace d'une représentation. (English summary) **80a:22007**
Quelques applications des C^*-algèbres et des algèbres de von Neumann à l'étude des représentations des groupes. **80j:22001**
Baggett, Larry (*with* Taylor, Keith) Groups with completely reducible regular representation. **80b:22009**
Berezin, F. A. Representations of a continuous direct product of universal coverings of the group of motions of the complex ball. (Russian) **80e:22009**
Burckel, R. B. Averaging a representation over a subgroup. **80m:22005**
Cooper, Jacob Lionel Bakst Linear transformations intertwining with group representations. **80d:22005**
Fabec, Raymond C. A theorem on extending representations. **80f:22002**
Fakler, Robert A. An intertwining number theorem for induced representations. **80h:22006**
Felix, Rainer (*with* Henrichs, Rolf Wim; Skudlarek, Hans-Ludwig) Topological Frobenius reciprocity for projective limits of Lie groups. **80e:22010**
Gommers, A. M. M. Continuous representations in the case where characteristic K is finite. **80j:22002**
Henrichs, Rolf Wim On decomposition theory for unitary representations of locally compact groups. **80g:22002**
See also **Felix, Rainer; et al., 80e:22010**
Ogata, Shigeo A unitary representation on a Hilbert space H_φ. **80f:22003**
Penney, R. C. Rational subspaces of induced representations and nilmanifolds. **80b:22010**
Picardello, Massimo A. A unimodular non-type-I group with purely atomic regular representation. (Italian summary) **80g:22003**
Sakai, Kôkichi On indecomposable unitary representations of locally compact abelian groups in Π_u-spaces. **80g:22004**
Schlichting, G. Groups with representations of bounded degree. **80m:22006**
Schlosser, Hartmut Zur Berechnung von "strong intertwining operators" unitärer Darstellungen von Gruppen und einige Anwendungen. **80d:22006**
Skudlarek, Hans-Ludwig *See* **Felix, Rainer; et al., 80e:22010**
Taylor, Keith *See* **Baggett, Larry, 80b:22009**

Secondary classifications:

Baggett, Larry Representations of the Mautner group. I. **(80e:22014)**
Cowling, Michael The Plancherel formula for a group not of type I. (Italian summary) **(80d:22013)**
Howe, Roger E. (*with* Moore, Calvin C.) Asymptotic properties of unitary representations. **(80g:22017)**
Kehlet, Esben T. A proof of the Mackey-Blattner-Nielsen theorem. **(80i:22019)**
Moore, Calvin C. *See* **Howe, Roger E., (80g:22017)**
Skudlarek, Hans-Ludwig On a two-sided version of Reiter's condition and weak containment. **(80h:43010)**

22D12 Other representations of locally compact groups

Aubert, P. L. Projecteurs dans $\mathfrak{N}(G)$: un exemple. **80k:22003**
Guichardet, A. Extensions des représentations induites des produits semi-directs. **80l:22017**
Sorkin, Rafael The triviality of continuous multipliers for the real line. **80e:22011**

Secondary classifications:

Anantharaman-Delaroche, Claire *See* **Combes, F.; et al., (80d:46107)**
Belousov, P. V. (*with* Sidonskiĭ, O. B.) Dual operators in lattices. (Russian) **(80g:33025)**
Combe, Ph. (*with* Rodriguez, R.; Sirugue-Collin, M.; Sirugue, M.) A uniqueness theorem for anticommutation relations and commutation relations of quantum spin systems. **(80f:82047)**
Combes, F. (*with* Anantharaman-Delaroche, Claire; Denizeau, Yves; Enoch, M.; Schwartz, Jean-Marie) ★Représentations des groupes localement compacts et applications aux algèbres d'opérateurs. **(80d:46107)**
Denizeau, Yves Un calcul fonctionnel associé à une représentation. (English summary) **(80g:47019)**
See also **Combes, F.; et al., (80d:46107)**
Duflo, Michel Représentations de semi-groupes de mesures sur un groupe localement compact. (English summary) **(80e:43002)**
Enoch, M. *See* **Combes, F.; et al., (80d:46107)**
Hudson, R. L. Translation-invariant traces and Fourier analysis of multiplier representation of vector groups. **(80d:46120)**
Reiter, H. Über den Satz von Weil-Cartier. (English summary) **(80f:43015)**
Rodriguez, R. *See* **Combe, Ph.; et al., (80f:82047)**
Sakai, Kôkichi On indecomposable unitary representations of locally compact abelian groups in Π_u-spaces. **(80g:22004)**
Schwartz, Jean-Marie *See* **Combes, F.; et al., (80d:46107)**
Sen, R. N. Theory of symmetry in the quantum mechanics of infinite systems. I. The state space and the group action. **(80h:81031a)**
Sidonskiĭ, O. B. *See* **Belousov, P. V., (80g:33025)**
Sirugue, M. *See* **Combe, Ph.; et al., (80f:82047)**
Sirugue-Collin, M. *See* **Combe, Ph.; et al., (80f:82047)**
Orléans *See* **Combes, F.; et al., (80d:46107)**
Séminaire:
Analyse Fonctionnelle *See* **Combes, F.; et al., (80d:46107)**

22D15 Group algebras of locally compact groups

Kotzmann, E. (*with* Losert, Viktor; Rindler, Harald) Dense ideals of group algebras. **80m:22007**
Losert, Viktor *See* **Kotzmann, E.; et al., 80m:22007**
McKennon, Kelly The structure space of the trigonometric polynomials on a compact group. **80j:22003**
Rindler, Harald *See* **Kotzmann, E.; et al., 80m:22007**

Secondary classifications:

Hauenschild, Wilfried (*with* Kaniuth, Eberhard) The generalized Wiener theorem for groups with finite-dimensional irreducible representations. **(80h:43006)**
(*with* Kaniuth, Eberhard) Ideal mit beschränkter approximativer Eins in Gruppenalgebren von Moore-Gruppen. (English summary) **(80e:43006)**
Kalton, Nigel (*with* Wood, G. V.) Norm-decreasing homomorphisms between ideals of $C(G)$. **(80f:43014)**
Kaniuth, Eberhard *See* **Hauenschild, Wilfried, (80e:43006)** *and* **Hauenschild, Wilfried, (80h:43006)**
Losert, Viktor Some properties of groups without the property P_1. **(80h:43004)**
Wood, G. V. *See* **Kalton, Nigel, (80f:43014)**

22D20 Representations of group algebras

22D25 C^*-algebras and W^*-algebras arising from group representations [See also 46Lxx.]

Greene, William A. Enveloping algebras and projective limits of locally compact groups. **80f:22004**
Loebl, Richard I. (*with* Schochet, Claude) Covariant representations on the Calkin algebra. I. **80e:22012**
Panov, A. N. The structure of the group C^*-algebra of a Euclidean motion group. (Russian. English summary) **80a:22008**
Schochet, Claude *See* **Loebl, Richard I., 80e:22012**
Sutherland, Colin E. Type analysis of the regular representation of a nonunimodular group. **80i:22018**

Secondary classifications:

Anantharaman-Delaroche, Claire *See* **Combes, F.; et al., (80d:46107)**
Arsac, Gilbert Quelques applications des C^*-algèbres et des algèbres de von Neumann à l'étude des représentations des groupes. **(80j:22001)**
Combes, F. (*with* Anantharaman-Delaroche, Claire; Denizeau, Yves; Enoch, M.; Schwartz, Jean-Marie) ★Représentations des groupes localement compacts et applications aux algèbres d'opérateurs. **(80d:46107)**
Dadašjan, K. Ju. *See* **Horuži, S. S., (80h:81074)**
Davies, E. Brian Dilations of completely positive maps. **(80a:46033)**
De Cannière, Jean (*with* Enock, Michel; Schwartz, Jean-Marie) Algèbres de Fourier associées à une algèbre de Kac. **(80k:43009)**
De-Michele, Leonede (*with* Mauceri, Giancarlo) On the Fourier-Stieltjes algebra of Euclidean motion groups. **(80m:43005)**
Denizeau, Yves *See* **Combes, F.; et al., (80d:46107)**
Ekhaguere, G. O. S. Markov fields in noncommutative probability theory on W^* algebras. **(80h:46110)**
Enoch, M. *See* **Combes, F.; et al., (80d:46107)**
Enock, Michel *See* **De Cannière, Jean; et al., (80k:43009)**
Figà-Talamanca, Alessandro (*with* Mauceri, Giancarlo) A characterization of nonatomic Hilbert algebras. **(80h:46083)**
Gootman, Elliot C. (*with* Rosenberg, Jonathan) The structure of crossed product C^*-algebras: a proof of the generalized Effros-Hahn conjecture. **(80h:46091)**
Horuži, S. S. (*with* Dadašjan, K. Ju.) Algebras of observables in models of quantum field theory with superselection rules. **(80h:81074)**
Lau, Anthony To Ming Uniformly continuous functionals on the Fourier algebra of any locally compact group. **(80m:43009)**
Mauceri, Giancarlo *See* **Figà-Talamanca, Alessandro, (80k:46083)** *and* **De-Michele, Leonede, (80m:43005)**
Promislow, David Dimension of null spaces with applications to group rings. **(80d:46117)**
Rieffel, Marc A. The type of group measure space von Neumann algebras. **(80g:46053)**
Rosenberg, Jonathan *See* **Gootman, Elliot C., (80h:46091)**
Sauvageot, Jean-Luc Idéaux primitifs de certains produits croisés. **(80d:46112)**
Schwartz, Jean-Marie *See* **Combes, F.; et al., (80d:46107)** *and* **De Cannière, Jean; et al., (80k:43009)**
Wang, S. P. On algebras of operators of finite rank. **(80a:47072)**
Orléans *See* **Combes, F.; et al., (80d:46107)**
Séminaire:
Analyse Fonctionnelle *See* **Combes, F.; et al., (80d:46107)**

22D30 Induced representations

Duponcheel, Luc How to use induced representations. **80c:22010**
Kehlet, Esben T. A proof of the Mackey-Blattner-Nielsen theorem. **80i:22019**
Ørsted, Bent Induced representations and a new proof of the imprimitivity theorem. **80d:22007**

Secondary classifications:

Backhouse, Nigel (*with* Hughes, J. W. B.) Projective representations of $SU(2)_\wedge R^4$. **(80i:81015)**
Fakler, Robert A. An intertwining number theorem for induced representations. **(80h:22006)**
Hughes, J. W. B. *See* **Backhouse, Nigel, (80i:81015)**
Plymen, R. J. Automorphic group representations: the hyperfinite Π_1 factor and the Weyl algebra. **(80m:46056)**
Sauvageot, Jean-Luc Idéaux primitifs de certains produits croisés. **(80d:46112)**

22D35 Duality theorems

Flood, Joe Pontryagin duality for topological modules. **80d:22008**
Sankaran, Subramanian Hochschild-Tannaka duality theorem for homogeneous spaces. (Italian summary) **80h:22007**

Secondary classifications:

Ajupov, Š. A. Duality theory for Boolean normed modules. (Russian) **(80a:46026)**
Day, Brian J. An extension of Pontryagin duality. **(80j:18011)**
On Pontryagin duality. **(80g:18008)**
Diarra, Bertin Algèbres de Hopf ultramétriques complètes. **(80b:46083)**
Haagerup, Uffe An example of a nonnuclear C^*-algebra, which has the metric approximation property. **(80j:46094)**
Litvinov, G. L. Dual topological algebras and topological Hopf algebras. (Russian) **(80a:46024)**
McKennon, Kelly The structure space of the trigonometric polynomials on a compact group. **(80j:22003)**
Sen, R. N. Bundle representations and their applications. **(80e:22003)**
Wawrzyńczyk, Antoni Cyclicity and generalized cyclicity of representations of topological algebras with approximate unit. (Russian summary) **(80j:46088)**

22D40 Ergodic theory on groups [See also 28Dxx and 43A60.]

Brown, James R. Ergodic groups of substitution operators associated with algebraically monothetic groups. **80h:22008**
Dani, S. G. Sequential entropy of generalised horocycles. **80e:22013**
Ellis, Robert Cohomology of flows. **80j:22004**
Miles, G. (*with* Thomas, R. K.) Generalized torus automorphisms are Bernoullian. **80c:22011**
Moore, Calvin C. (*with* Zimmer, Robert J.) Groups admitting ergodic actions with generalized discrete spectrum. **80m:22008**
Tagi-Zade, A. T. Entropy characteristics of amenable groups. (Russian. Azerbaijani and English summaries) **80d:22009**
Thomas, R. K. *See* **Miles, G., 80c:22011**
Zimmer, Robert J. Uniform subgroups and ergodic actions of exponential Lie groups. **80c:22012**
See also **Moore, Calvin C., 80m:22008**

Secondary classifications:

Dani, S. G. Some mixing multiparameter dynamical systems. **(80h:58038)**
On invariant measures, minimal sets and a lemma of Margulis. **(80d:58039)**
Emerson, William R. The Hausdorff paradox for general group actions. **(80g:43003)**
Johnson, Russell A. Existence of a strong lifting commuting with a compact group of transformations. II. **(80m:28008)**
Ledrappier, François Un champ markovien peut être d'entropie nulle et mélangeant. (English summary) **(80b:28030)**
Liardet, Pierre Répartition et ergodicité. **(80d:10073)**
Lind, D. A. Split skew products, a related functional equation, and specification. **(80c:28023)**
Margulis, G. A. Factor groups of discrete subgroups and measure theory. (Russian) **(80k:22005)**
Miles, G. (*with* Thomas, R. K.) The breakdown of automorphisms of compact topological groups. **(80c:22007)**
Moulin-Ollagnier, Jean (*with* Pinchon, Didier) Groupes pavables et principe variationnel. **(80g:28019)**
Mrozek, M. Inverse limits of torus-groups and minimal sets of some almost periodic continuous flows. **(80g:54049)**
Peters, Justin Entropy on discrete abelian groups. **(80i:28037)**
Pinchon, Didier *See* **Moulin-Ollagnier, Jean, (80g:28019)**
Series, Caroline The Rohlin tower theorem and hyperfiniteness for actions of continuous groups. **(80j:28025)**
Tagi-Zade, A. T. Entropy properties of operations of amenable groups. (Russian) **(80f:28026)**
Thomas, R. K. *See* **Miles, G., (80c:22007)**
Zimmer, Robert J. Ergodic actions and stochastic processes on groups and homogeneous spaces. **(80h:28030)**

22D45 Automorphism groups of locally compact groups

Moskalenko, Z. I. The existence of compact totally disconnected groups with a locally compact but noncompact group of topological automorphisms. (Russian) **80h:22009**
Moskowitz, Martin Some remarks on automorphisms of bounded displacement and bounded cocycles. **80i:22020**

22D99 None of the above, but in this section

Chen, Su Shing On nonamenable groups. **80d:22010**
(Gerl, Peter) *See* **Maxones, Walter; et al., 80g:22005**
Maxones, Walter (*with* Rindler, Harald) Bemerkungen zu: "Gleichverteilung auf lokalkompakten Gruppen" [Math. Nachr. 71 (1976), 249–260; MR 53 #6231] von P. Gerl. **80g:22005**
Rindler, Harald *See* **Maxones, Walter, 80g:22005**
Wolf, Joseph A. Fourier inversion problems on Lie groups and a class of pseudodifferential operators. **80h:22010**

Secondary classifications:

Henrichs, Rolf Wim On characters of subgroups. **(80i:43009)**
Hlawka, Edmund ★Theorie der Gleichverteilung. **(80j:10057)**
Korobicyn, V. A. (*with* Sidonskiĭ, O. B.) The difference operator on a group over a matrix ring. (Russian) **(80d:47057)**
Sidonskiĭ, O. B. *See* **Korobicyn, V. A., (80d:47057)**
Taschner, Rudolf J. Der Differenzensatz von van der Corput und gleichverteilte Funktionen. **(80g:10055)**
Troallic, Jean-Pierre Fonctions à valeurs dans des espaces fonctionnels généraux: théorèmes de R. Ellis et de I. Namioka. (English summary) **(80d:54012)**

22Exx Lie groups {For the topology of Lie groups and homogeneous spaces, see 57Sxx, 57Txx; for analysis thereon, see 43A80, 43A85, 43A90.}

22E05 Local Lie groups [See also 34–XX, 35–XX, 58H05.]

Bucher, W. Kontinuierliche Iterationen formal-biholomorpher Abbildungen. **80j:22005**
Gamkrelidze, R. V. Exponential representation of solutions of ordinary differential equations. **80i:22021**
Holina, G. G. Lie theorems in locally convex group chunks. (Russian) **80g:22006**
Liedl, Roman Über eine Methode zur Lösung der Translationsgleichung. **80m:22009**
Netzer, Norbert Differentialgleichungen im Zusammenhang mit der Pilgerschrittransformation. **80m:22010**

Secondary classifications:

Ardalan, Farhad Self-dual Euclidean gauge fields for semisimple groups. **(80a:81106)**
Bicknell, Kevin (*with* Morris, Sidney A.) Norms on free topological groups. **(80a:22007)**
Corones, James *See* **Sym, Antoni, (80d:58074)**
Fuščič, V. I. (*with* Nikitin, A. G.) Group properties of Maxwell equations. (Russian. English summary) **(80e:78006)**
Hainzl, J. Über die Gestalt von gruppeninvarianten linearen partiellen Differentialoperatoren. **(80a:35007)**
Ibragimov, N. H. On the theory of groups of Lie-Bäcklund transformations. (Russian) **(80h:58059)**
Kapitanskiĭ, L. V. Group analysis of the Navier-Stokes and Euler equations in the presence of rotation symmetry and new exact solutions to these equations. (Russian) **(80g:35104)**
Morris, Sidney A. *See* **Bicknell, Kevin, (80b:22007)**
Motylev, L. Ju. Transformation of the system of Maxwell equations in an inhomogeneous medium to an equation on the rotation group. (Russian. English summary) **(80k:78012)**
Nikitin, A. G. *See* **Fuščič, V. I., (80e:78006)**
Reich, L. *See* **Schwaiger, Jens, (80i:39011)**
Schwaiger, Jens (*with* Reich, L.) Über die Funktionalgleichung $N \circ T = T \circ M$ für formale Potenzreihen. **(80i:39011)**
Škol'nikov, P. L. *See* **Stražev, V. I., (80d:81083)**
Stražev, V. I. (*with* Škol'nikov, P. L.) Dyal symmetry of vector and spinor fields. (Russian. English summary) **(80d:81083)**
Sym, Antoni (*with* Corones, James) Lie-group explanation of geometric interpretations of solitons. **(80d:58074)**

22E10 General properties and structure of complex Lie groups [See also 32M05.]

Rizzoli, Irina On some complex analytic structures on a class of nilpotent Lie groups. (Romanian. English summary) **80c:22013**

Secondary classifications:

Gould, M. D. Applications of the characteristic identity for $GL(N)$. (French summary) **(80c:17010)**
Helgason, Sigurdur ★Differential geometry, Lie groups, and symmetric spaces. **(80k:53081)**
Popov, A. M. Irreducible semisimple linear Lie groups with finite stationary subgroups of general position. (Russian) **(80b:20056)**

22E15 General properties and structure of real Lie groups

Charbonnel, Jean-Yves (*with* Khalgui, Mohamed Salah) Polarisations pour un certain type de groupes de Lie. (English summary) **80b:22011**
Harvey, Alex Automorphisms of the Bianchi model Lie groups. **80g:22007**
Khalgui, Mohamed Salah *See* **Charbonnel, Jean-Yves, 80b:22011**
Puiu, Gabriel Sur le groupe de mouvements de l'espace pseudo-euclidien hyperbolique. **80i:22022**
Zerling, David Dense subgroups of Lie groups. II. **80a:22009**

Secondary classifications:

Berar, Jean François *See* **Weigel, Dominique, (80a:20057)**
Burdet, G. (*with* Perrin, M.; Perroud, M.) Generating functions for the affine symplectic group. **(80d:58023)**
Grecu, Eftimie Sur la variété du groupe orthogonal simplectique. **(80h:20063)**
Guo, Han Ying Transformation groups and invariants of canonical space-time. (Chinese) **(80d:83011)**
Hofmann, Karl Heinrich (*with* Mukherjea, Arunava) On the density of the image of the exponential function. **(80c:22008)**
Krämer, Manfred Sphärische Untergruppen in kompakten zusammenhängenden Liegruppen. **(80f:22011)**
Mukherjea, Arunava *See* **Hofmann, Karl Heinrich, (80c:22008)**
Perrin, M. *See* **Burdet, G.; et al., (80d:58023)**
Perroud, M. *See* **Burdet, G.; et al., (80d:58023)**

Springer, T. A. Reductive groups. (80h:20062)
Vosylius, R. Categories of spaces with structure equations. (Russian. Lithuanian and English summaries) (80b:58070)
Weigel, Dominique (*with* Berar, Jean François) Définition algébrique des groupes de symétrie (d'isométries) des cristaux et autres objets parfaits de l'espace à n dimensions. (English summary) (80a:20057)

22E20 General properties and structure of other Lie groups

Nishikawa, Mitsuru Exponential image in the real special linear group. 80h:22011
Zerling, David On the existence of dense analytic subgroups. 80f:22023

Secondary classifications:

Bérard Bergery, Lionel Sur la courbure des métriques riemanniennes invariantes des groupes de Lie et des espaces homogènes. (80k:53078)

22E25 Nilpotent and solvable Lie groups

Auslander, L. (*with* Tolimieri, R.) Algebraic structures for $\oplus\Sigma_{n>1}L^2(\mathbf{Z}/n)$ compatible with the finite Fourier transform. 80b:22012
Goodman, Roe Holomorphic representations of nilpotent Lie groups. 80d:22011
Goto, Morikuni On a class of type I solvable Lie groups. I. 80m:22011a
On a class of type I solvable Lie groups. II. 80m:22011b
Hey, H. J. (*with* Ludwig, J.) Der Satz von Helson-Reiter für spezielle nilpotente Lie-Gruppen. 80d:22012
Ludwig, J. *See* Hey, H. J., 80d:22012
Tolimieri, R. *See* Auslander, L., 80b:22012

Secondary classifications:

Rangi, Albert Théorème de la limite centrale sur les groupes extensions compactes d'un groupe de Lie résoluble connexe de type rigide. (English summary) (80b:22015)
Zinov'ev, Ju. M. Nonunitary representations of $MH(2)$, the $ax+b$ group and the Laplace transform. (Russian. English summary) (80g:46039)

22E27 Representations of nilpotent and solvable Lie groups (special orbital integrals, non-Type I representations, etc.)

Arnal, Didier Analytic vectors and irreducible representations of nilpotent Lie groups and algebras. 80i:22024
Baggett, Larry Representations of the Mautner group. I. 80e:22014
Cowling, Michael The Plancherel formula for a group not of type I. (Italian summary) 80d:22013
Fujiwara, Hidenori On the construction of unitary representations of solvable Lie groups. (Japanese) 80a:22010
On holomorphically induced representations of exponential groups. 80g:22008
Shoda's theorem for exponential groups. 80j:22006
Jenkins, J. W. Primary projections on L^2 of a nilmanifold. 80d:22014
Lion, Gérard Extensions de représentations de groupes de Lie nilpotents et indices de Maslov. (English summary) 80b:22013
Moscovici, Henri (*with* Verona, Andrei) Holomorphically induced representations of solvable Lie groups. (French summary) 80i:22025
(*with* Verona, Andrei) Harmonically induced representations of nilpotent Lie groups. 80a:22011
(*with* Verona, Andrei) Quantization and projective representations of solvable Lie groups. 80i:22026
Verona, Andrei *See* Moscovici, Henri, 80a:22011; Moscovici, Henri, 80i:22025 *and* Moscovici, Henri, 80i:22026

Secondary classifications:

Dani, S. G. Nilmanifolds with Anosov automorphism. (80k:58082)
Gallardo, Léonard (*with* Schott, René) Marches aléatoires sur les espaces homogènes de certains groupes de type rigide. (English summary) (80e:60086)
Goto, Morikuni On a class of type I solvable Lie groups. I. (80m:22011a)
On a class of type I solvable Lie groups. II. (80m:22011b)
Penney, R. C. Rational subspaces of induced representations and nilmanifolds. (80b:22010)
Schott, René *See* Gallardo, Léonard, (80e:60086)

22E30 Analysis on real and complex Lie groups [See also 33A75, 43–XX.]

Burbasch, Dan Fourier inversion for unipotent invariant integrals. 80j:22007
Dixmier, Jacques (*with* Malliavin, Paul) Factorisations de fonctions et de vecteurs indéfiniment différentiables. (English summary) 80f:22005
Duflo, Michel (*with* Wigner, David) Sur la résolubilité des équations différentielles invariantes sur un groupe de Lie. 80a:22012
(*with* Wigner, David) Convexité pour les opérateurs différentiels invariants sur les groupes de Lie. 80e:22015
Eymard, Pierre Le noyau de Poisson et la théorie des groupes. 80b:22014
Falkowski, B. J. First order cocycles for SL(2, C). 80g:22009
Fegan, H. D. The heat equation on a compact Lie group. 80g:22010
Fiuta-Mattos, Luis A. Analytic continuation of the Fourier series on connected compact Lie groups. 80m:22012
Geller, Daryl Fourier analysis on the Heisenberg group. 80g:22011
(Helgason, Sigurdur) *See* Lacroix, Jean, 80j:22008
Hirk, Rebecca A. Fourier inversion of invariant integrals on semisimple real Lie groups. 80i:22027
Kawazoe, Takeshi Some characterization of the Schwartz space and an analogue of the Paley-Wiener type theorem on rank 1 semisimple Lie groups. 80h:22012
Lacroix, Jean Représentation des fonctions propres sur un espace symétrique (d'après Helgason). 80j:22008
Lassalle, Michel Séries de Laurent des fonctions holomorphes dans la complexification d'un espace symétrique compact. 80f:22006
Malliavin, Paul *See* Dixmier, Jacques, 80f:22005
Rangi, Albert Théorème de la limite centrale sur les groupes extensions compactes d'un groupe de Lie résoluble connexe de type rigide. (English summary) 80b:22015
Wigner, David *See* Duflo, Michel, 80a:22012 *and* Duflo, Michel, 80e:22015

Secondary classifications:

Adimurthi (*with* Kumaresan, S.) On the singular support of distributions and Fourier transforms on symmetric spaces. (80k:43010)
Bessis, G. *See* Bessis-Mazloum, Nadine, (80h:81086)
Bessis-Mazloum, Nadine (*with* Bessis, G.) Electronic wavefunctions in a space of constant curvature. (80h:81086)
Cordes, H. O. On pseudodifferential operators and smoothness of special Lie-group representations. (80m:47047)
Dadok, Jiri Paley-Wiener theorem for singular support of K-finite distributions on symmetric spaces. (80k:43011)
Dieudonné, Jean Spherical functions and special functions. (80m:43013)
Dooley, A. H. Norms of characters and lacunarity for compact Lie groups. (80i:43011)
Duistermaat, J. J. Harmonic analysis on semisimple Lie groups. (80m:22018)
Felix, Rainer (*with* Henrichs, Rolf Wim; Skudlarek, Hans-Ludwig) Topological Frobenius reciprocity for projective limits of Lie groups. (80e:22010)
Flensted-Jensen, Mogens Spherical functions of a real semisimple Lie group. A method of reduction to the complex case. (80f:43022)
Goodman, Roe Holomorphic representations of nilpotent Lie groups. (80d:22011)
Helffer, Bernard (*with* Nourrigat, Jean François) Opérateurs hypoelliptiques sur des groupes nilpotents. (80m:58037)
Henrichs, Rolf Wim *See* Felix, Rainer; et al., (80e:22010)
Korányi, Adam A survey of harmonic functions on symmetric spaces. (80k:43012)
Kumaresan, S. *See* Adimurthi, (80k:43010)
Lassalle, Michel Sur la transformation de Fourier-Laurent dans un groupe analytique complexe réductif. (English summary) (80b:32006)
Lévy-Bruhl-Laperrière, Anne Spectre du de Rham Hodge sur l'espace projectif complexe. (80g:43016)
Lewis, John B. Eigenfunctions on symmetric spaces with distribution-valued boundary forms. (80f:43020)
Molčanov, V. F. Tensor products of unitary representations of the three-dimensional Lorentz group. (Russian) (80i:22030)
Nielsen, Holger Bech (*with* Ninomiya, Masao) β-function in a noncovariant Yang-Mills theory. (80k:81104)
Ninomiya, Masao *See* Nielsen, Holger Bech, (80k:81104)
Nourrigat, Jean François *See* Helffer, Bernard, (80m:58037)
Rothschild, Linda Preiss Smoothness of solutions of certain partial differential equations constructed from vector fields. (80m:58038)
Skudlarek, Hans-Ludwig *See* Felix, Rainer; et al., (80e:22010)
Stanton, Robert J. (*with* Tomas, Peter A.) Pointwise inversion of the spherical transform on $L^p(G/K)$, $1<p<2$. (80e:43011)
Tomas, Peter A. *See* Stanton, Robert J., (80e:43011)
Trimèche, Khélifa Probabilités indéfiniment divisibles et théorème de la limite centrale pour une convolution généralisée sur la demi-droite. (English summary) (80b:60018)

22E35 Analysis on p-adic Lie groups [See also 12A85.]

22E40 Discrete subgroups of Lie groups [See also 20Hxx and 32Nxx.]

Apanasov, B. N. On Mostow's rigidity theorem. (Russian) 80k:22004
Chen, Su Shing Spectra of discrete uniform subgroups of semisimple Lie groups. 80e:22016
Cocan, A. *See* Simionescu, C.; et al., 80h:22015
Jørgensen, Troels Comments on a discreteness condition for subgroups of SL(2, C). 80h:22013
Margulis, G. A. Factor-groups of discrete subgroups. (Russian) 80a:22013
Factor groups of discrete subgroups and measure theory. (Russian) 80k:22005
Finiteness of quotient groups of discrete subgroups. (Russian) 80k:22006
Milovanov, M. V. The countability of the set of solvable Lie groups with a given lattice. (Russian) 80j:22009
Mostow, G. D. Discrete subgroups of Lie groups. 80m:22013
Existence of a nonarithmetic lattice in SU(2, 1). 80f:22007
Pitiş, Gh. *See* Simionescu, C.; et al., 80h:22015
Raghunathan, M. S. Corrections to: "Vanishing theorems for cohomology groups associated to discrete subgroups of semisimple Lie groups" (Osaka J. Math. 3 (1966), 243–256). 80d:22015
Rieffel, Marc A. Regularly related lattices in Lie groups. 80h:22014
Simionescu, C. (*with* Cocan, A.; Pitiş, Gh.) Groupes discrets complets de certains groupes G_4 résolubles. (Romanian summary) 80h:22015
Staffeldt, R. E. Reduction theory and K_2 of the Gaussian integers. 80m:22014
Stieglitz, Andreas Chabauty- und Weil-Räume topologischer Gruppen. 80h:22016
Wang, S. P. Correction: "On density properties of certain subgroups of locally compact groups" (Duke Math. J. 43 (1976), no. 3, 561–578). 80h:22016
Zimmer, Robert J. An analogue of the Mostow-Margulis rigidity theorems for ergodic actions of semisimple Lie groups. 80m:22016
Zink, Thomas Über die Anzahl der Spitzen einiger arithmetischer Untergruppen unitärer Gruppen. 80i:22028

Secondary classifications:

Borel, Armand (*with* Harder, G.) Existence of discrete cocompact subgroups of

reductive groups over local fields. (80b:22022)
Chahal, Jasbir Singh Arithmetic subgroups of SL(n, k). (80l:10031)
Chen, Su Shing Weak rigidity of compact negatively curved manifolds. (80c:53059)
Chiswell, I. M. The Bass-Serre theorem revisited. (80j:20046)
Dani, S. G. On invariant measures, minimal sets and a lemma of Margulis. (80d:58039)
Ehrlich, Paul E. Boundary points of the Dirichlet fundamental region. (80k:53070)
Farrell, F. T. (*with* Hsiang, Wu Chung) On the rational homotopy groups of the diffeomorphism groups of discs, spheres and aspherical manifolds. (80g:57043)
Gromov, M. Almost flat manifolds. (80h:53041)
Grunewald, Fritz J. (*with* Segal, Daniel) A note on arithmetic groups. (80c:20061)
Günther, Paul Problème de réseaux dans les espaces hyperboliques. (English summary) (80h:58065)
Harder, G. *See* **Borel, Armand**, (80b:22022)
Hoare, A. H. M. On lifting Fuchsian groups. (80m:30056)
Hsiang, Wu Chung *See* **Farrell, F. T.**, (80g:57043)
Kulkarni, Ravindra S. Some topological aspects of Kleinian groups. (80j:57044)
Roblfs, J. Arithmetisch definierte Gruppen mit Galoisoperation. (80j:20043)
Segal, Daniel *See* **Grunewald, Fritz J.**, (80c:20061)
Skriganov, M. M. *See* **Venkov, A. B.**, (80l:10036)
Venkov, A. B. (*with* Skriganov, M. M.) On the question of H. Weyl's formula in the spectral theory of automorphic functions. (Russian) (80l:10036)
Wang, S. P. On L-subgroups of locally compact groups. (80e:22006)

22E41 Continuous cohomology [See also 57R32, 57Txx, 58H10.]

22E43 Structure and representation of the Lorentz group

Berezin, A. V. (*with* Fedorov, F. I.) Matrix elements of unitary representations of the Lorentz group. (Russian. English summary) (80b:22017)
Dalton, B. J. New nonlinear realizations of SL(2, C). (80l:22029)
Fedorčuk, V. M. Continuous subgroups of the inhomogeneous de Sitter group $\mathcal{P}(1, 4)$. (Russian) (80f:22008)
Fedorov, F. I. *See* **Berezin, A. V.**, (80b:22017)
Kerimov, G. A. (*with* Verdiev, İ. A.) Clebsch-Gordan coefficients of the SL(2, C) group. (80h:22017)
Maekawa, Takayoshi Note on the linear representations of any dimensional Lorentz group and their matrix elements. (80h:22018)
Molčanov, V. F. Tensor products of unitary representations of the three-dimensional Lorentz group. (Russian) (80l:22030)
Verdiev, İ. A. *See* **Kerimov, G. A.**, (80h:22017)

Secondary classifications:

Berezin, A. V. (*with* Boguš, A. A.; Otčik, V. S.; Fedorov, F. I.) Boost matrix elements of unitary representations of the Lorentz group in the base $SO(3.1) \supset SO(2.1) \supset SO(2)$. (Russian) (80g:81022)
Boguš, A. A. (*with* Kisel', V. V.) Equations with multiple representations of the Lorentz group and interaction of Pauli type. (Russian. English summary) (80g:83026)
See also **Berezin, A. V.**; **et al.**, (80g:81022)
Cowling, Michael Fractional integration on nilpotent groups and representations of semisimple groups. (80m:22017)
Dubovoi, V. K. Open fields that are associated with the Duffin equation for scalar particles. (Russian) (80c:47015)
Fedorov, F. I. *See* **Berezin, A. V.**; **et al.**, (80g:81022)
Gressing, G. Symmetric and traceless tensors on Minkowski space. (80j:83001)
Kisel', V. V. *See* **Boguš, A. A.**, (80g:83026)
Martins, L. C. (*with* Podio-Guidugli, Paolo) A new proof of the representation theorem for isotropic, linear constitutive relations. (80a:73005)
Otčik, V. S. *See* **Berezin, A. V.**; **et al.**, (80g:81022)
Podio-Guidugli, Paolo *See* **Martins, L. C.**, (80a:73005)
Šondin, Ju. G. Asymptotic expansion of the Heisenberg field commutator over finite-dimensional irreducible representations of the Lorentz group. (Russian. English summary) (80a:81037)
Verdiev, İ. A. ★Инварианты представлений групп Лоренца и их применение в дуальной модели физики частиц. (Russian) [Invariants of the representations of Lorentz groups and their applications in the dual model of particle physics] (80j:81083)

22E45 Representations of Lie and linear algebraic groups over real fields: analytic methods {For the purely algebraic theory, see 20G05.}

Aarnes, Johan F. Distributions of positive type and representations of Lie groups. (80c:22017)
Angelopoulos, E. The linear representations of $\overline{SL}(3, \mathbf{R})$ on a Banach space. (80l:22031)
Baggett, Larry A characterization of "Heisenberg groups"; when is a particle free? (80a:22014)
Blattner, Robert J. (*with* Wolf, Joseph A.) Explicit quantization of the Kepler manifold. (80h:22019)
Borisov, A. B. The unitary representations of $\overline{GL}(4, \mathbf{R})$. (80a:22015)
The unitary representations of the Diff $\mathbf{R}^N$ group. (80j:22010)
Cornwell, J. F. Direct determination of the Langlands decompositions for the parabolic subalgebras of noncompact semisimple real Lie algebras. (80g:22012)
Cowling, Michael Fractional integration on nilpotent groups and representations of semisimple groups. (80m:22017)
Dobrev, V. K. (*with* Petkova, V. B.) Elementary representations and intertwining operators for the group SU*(4). (80a:22016)
Duistermaat, J. J. Harmonic analysis on semisimple Lie groups. (80m:22018)
El Samra, N. (*with* King, R. C.) Reduced determinantal forms for characters of the classical Lie groups. (80j:22011)
(*with* King, R. C.) Dimensions of irreducible representations of the classical Lie groups. (80j:22012)
Hecht, Henryk On characters and asymptotics of representations of a real reductive Lie group. (80l:22032)
Hochschild, G. On representing analytic groups with their automorphisms. (80c:22014)
Jakobsen, Hans Plesner Intertwining differential operators for Mp(n, **R**) and SU(n, n). (80f:22009)
Higher order tensor products of wave equations. (80m:22019)
Tensor products, reproducing kernels, and power series. (80f:22010)
(*with* Vergne, Michèle) Restrictions and expansions of holomorphic representations. (80m:22020)
King, R. C. *See* **El Samra, N.**, (80j:22011) *and* **El Samra, N.**, (80j:22012)
Knapp, A. W. (*with* Zuckerman, Gregg) Normalizing factors, tempered representations, and L-groups. (80m:22021)
Kolk, Johan Antoon Casper ★The Selberg trace formula and asymptotic behaviour of spectra. (80a:22017)
Krämer, Manfred Sphärische Untergruppen in kompakten zusammenhängenden Liegruppen. (80f:22011)
Lemire, F. (*with* Patera, J.) Formal analytic continuation of Gel'fand's finite-dimensional representations of gl(n, C). (80g:22013)
Maekawa, Takayoshi Linear representations of any dimensional Lorentz group and computation formulas for their matrix elements. (80f:22012)
Magnus, Alfred Nonspherical principal series representations of a semisimple Lie group. (80f:22013)
Martin, Robert P. Tensor products for SL(2, k). (80l:22033)
Molčanov, V. F. Reduction of representations of the supplementary series of the de Sitter group 2+3 with respect to the Lorentz group. (Russian. English summary) (80e:22018)
Moscovici, Henri (*with* Verona, Andrei) Coherent states and square integrable representations. (80d:22016)
Neunhöffer, Helmut Über Kronecker-Produkte irreduzibler Darstellungen von SL(2, **R**). (English summary) (80l:22034)
Nguyen Huu Anh Sur une conjecture de Wolf et Moore caractérisant les groupes de Lie ayant une série discrète. (English summary) (80c:22015)
Classification des groupes de Lie connexes unimodulaires possédant une série discrète. (English summary) (80m:22022)
Patera, J. *See* **Lemire, F.**, (80g:22013)
Petkova, V. B. *See* **Dobrev, V. K.**, (80a:22016)
Pinczon, Georges (*with* Simon, Jacques) Non-linear representations of inhomogeneous groups. (80a:22018)
Shelstad, D. Characters and inner forms of a quasisplit group over **R**. (80m:22023)
Simon, Jacques *See* **Pinczon, Georges**, (80a:22018)
Šrainer, E. G. Generalized Stiefel manifolds and unitary linear representations of groups of motions of quasi-elliptic spaces. (Russian) (80j:22013)
Tuong Ton That Explicit decomposition of tensor products of certain analytic representations of symplectic groups. (80e:22019)
Vergne, Michèle *See* **Jakobsen, Hans Plesner**, (80m:22020)
Verona, Andrei *See* **Moscovici, Henri**, (80d:22016)
Wallach, Nolan R. Representations of reductive Lie groups. (80m:22024)
Wolf, Joseph A. Representations associated to minimal co-adjoint orbits. (80e:22020)
See also **Blattner, Robert J.**, (80h:22019)
Yamazaki, Tadashi On a generalization of the Fourier transformation. (80n:22019)
Zaicev, A. A. Holomorphically induced representations of Lie groups with an abelian normal subgroup. (Russian) (80m:22025)
Zuckerman, Gregg *See* **Knapp, A. W.**, (80m:22021)

Secondary classifications:

Arens, Richard Lifting group actions to the cotangent bundle. (80b:58038)
Arthur, James G. Harmonic analysis of invariant distributions. (80g:43015)
Berezin, F. A. Representations of a continuous direct product of universal coverings of the group of motions of the complex ball. (Russian) (80e:22009)
Connes, Alain (*with* Moscovici, Henri) The L^2-index theorem for homogeneous spaces. (80g:58046)
Deligne, Pierre Extensions centrales non résiduellement finies de groupes arithmétiques. (English summary) (80g:20056)
Donnelly, Harold G-spaces, the asymptotic splitting of $L^2(M)$ into irreducibles. (80b:58063)
Gross, Kenneth I. On the evolution of noncommutative harmonic analysis. (80b:01016)
Ikeda, Akira (*with* Taniguchi, Yoshiharu) Spectra and eigenforms of the Laplacian on S^n and P^n(C). (80b:53037)
Kashiwa, Taro *See* **Ohnuki, Yoshio**, (80d:81029)
Kostant, Bertram On Whittaker vectors and representation theory. (80b:22020)
Miatello, Roberto J. On the Plancherel measure for linear Lie groups of rank one. (80h:22021)
Moscovici, Henri *See* **Connes, Alain**, (80g:58046)
Ne'eman, Yuval (*with* Šijački, Djordje) Gravitational interaction of hadrons and leptons: linear (multiplicity-free) bandor and nonlinear spinor unitary irreducible representations of $\overline{SL}(4, \mathbf{R})$. (80d:81149)
Ohnuki, Yoshio (*with* Kashiwa, Taro) Coherent states of Fermi operators and the path integral. (80d:81029)
Ol'šanskiĭ, G. I. Unitary representations of the infinite-dimensional classical groups $U(p, \infty)$, $SO_0(p, \infty)$, $Sp(p, \infty)$, and of the corresponding motion groups. (Russian) (80g:22020)
Pjateckiĭ, V. S. Convex cones of T-finite type. (Russian) (80f:32021)
Rallis, S. (*with* Schiffmann, G.) Automorphic forms constructed from the Weil representation: holomorphic case. (80d:10038)
Schiffmann, G. *See* **Rallis, S.**, (80d:10038)
Schwarz, Gerald W. Representations of simple Lie groups with regular rings of invariants. (80m:14032)
Šijački, Djordje *See* **Ne'eman, Yuval**, (80d:81149)

Sitaram, Alladi Positive definite distributions on $K\backslash G/K$. **(80g:43017)**
Stanley, Richard P. Combinatorics and invariant theory. **(80e:15020)**
Taniguchi, Yoshiharu *See* **Ikeda, Akira**, **(80b:53037)**
Zăgănescu, M. The incomplete beta-function in the theory of the Veneziano-function. (Romanian summary) **(80e:81097)**

22E46 Semi-simple Lie groups and their representations

Agranovskiĭ, M. L. Fourier transformation on $SL_2(\mathbf{R})$ and Morera-type theorems. (Russian) **80j:22014**
Anderson, Mary F. A simple expression for the Casimir operator on a Lie group. **80j:22015**
Exner, Pavel *See* **Havlíček, Miloslav**, **80b:22018**
Gavrilik, O. M. *See* **Klimik, A. U.**, **80i:22035**
Havlíček, Miloslav (*with* Exner, Pavel) Matrix canonical realizations of the Lie algebra (m,n). II. Casimir operators. **80b:22018**
Herb, Rebecca A. (*with* Sally, P. J., Jr.) Singular invariant eigendistributions as characters in the Fourier transform of invariant distributions. **80j:22016**
Characters of averaged discrete series on semisimple real Lie groups. **80h:22020**
Howe, Roger E. On some results of Strichartz and Rallis and Schiffman. **80f:22014**
Klimik, A. U. (*with* Gavrilik, O. M.) Representation matrix elements and Clebsch-Gordan coefficients of the semisimple Lie groups. **80i:22035**
Lipsman, Ronald L. On the unitarized adjoint representation of a semisimple Lie group. II. **80k:22007b**
On the unitary representations of a semisimple Lie group given by the invariant integral on its Lie algebra. **80k:22007a**
Mistello, Roberto J. On the Plancherel measure for linear Lie groups of rank one. **80h:22021**
Midorikawa, Hisaichi On the explicit formulae of characters for discrete series representations. **80f:22015**
Mikami, Shunsuke A simple expression of the characters of certain discrete series representations. **80m:22015**
Princ, Mirko Irreducibility of nonunitary principal series of semisimple Lie groups with one conjugacy class of Cartan subgroups. **80m:22026**
Repka, Joe Tensor products of unitary representations of $SL_2(\mathbf{R})$. **80g:22014**
Sally, P. J., Jr. *See* **Herb, Rebecca A.**, **80j:22016**
Speh, Birgit Degenerate series representations of the universal covering group of SU(2, 2). **80j:22017**
Sternberg, Shlomo Some recent results on the metaplectic representation. **80g:22015**
Vogan, David A., Jr. Irreducible characters of semisimple Lie groups. I. **80g:22016**
Wallach, Noland R. Representations of semi-simple Lie groups and Lie algebras. **80b:22019**

Secondary classifications:

Frè, P. On the mass-group associated to hadronic mass-spectrum. The role and the problems of SL(2, **R**) and SL(2, **Z**). **(80i:81058)**
Helgason, Sigurdur ★Differential geometry, Lie groups, and symmetric spaces. **(80k:53081)**
Kuila, Stephen S. On certain arithmetic automorphic forms for SU(1, q). **(80f:10033)**
Stelle, K. S. (*with* West, P. C.) de Sitter gauge invariance and the geometry of the Einstein-Cartan theory. **(80i:83036)**
West, P. C. *See* **Stelle, K. S.**, **(80i:83036)**
Yamaguchi, Satoru Spectra of flag manifolds. **(80b:58056)**
Zhuravlev, Alain Formule sommatoire pour la transformation de Fourier sphérique. **(80b:10042)**

22E47 Representations of Lie and real algebraic groups: algebraic methods (Verma modules, etc.) [See also 17B35.]

Duflo, Michel Réprésentation unitaires irréductibles des groupes simples complexes de rang deux. (English summary) **80i:22036**
Hughes, J. W. B. (*with* Yadegar, J.) O(3) shift operators: the general analysis. **80a:22020**
Kostant, Bertram On Whittaker vectors and representation theory. **80b:22020**
Mageron, Bernard Structure des polynômes invariants sur l'algèbre de Lie d'un groupe symplectique inhomogène. (English summary) **80b:22021**
Parthasarathy, R. A generalization of the Enright-Varadarajan modules. **80f:22016**
Yadegar, J. *See* **Hughes, J. W. B.**, **80a:22020**

Secondary classifications:

Garland, Howard The arithmetic theory of loop algebras. **(80a:17012)**
Golo, V. L. (*with* Perelomov, A. M.) A few remarks on chiral theories with sophisticated topology. **(80i:81029)**
Nevanen, Timo A complete reducibility criterion with an application to representations of semisimple groups. **(80j:20042)**
Perelomov, A. M. *See* **Golo, V. L.**, **(80i:81029)**
Richardson, R. W. Commuting varieties of semisimple Lie algebras and algebraic groups. **(80c:17009)**

22E50 Representations of Lie and linear algebraic groups over local fields

Borel, Armand (*with* Harder, G.) Existence of discrete cocompact subgroups of reductive groups over local fields. **80b:22022**
Carayol, Henri Représentations supercuspidales de GL_n. (English summary) **80b:22023**
Harder, G. *See* **Borel, Armand**, **80b:22022**
Howe, Roger E. (*with* Moore, Calvin C.) Asymptotic properties of unitary representations. **80g:22017**
Laha, R. G. A class of square integrable irreducible unitary representations of some linear groups over commutative p-fields. **80a:22021**
Moore, Calvin C. *See* **Howe, Roger E.**, **80g:22017**
Silberger, Allan J. Isogeny restrictions of irreducible admissible representations are finite direct sums of irreducible admissible representations. **80f:22017**
Winarsky, Norman Reducibility of principal series representations of p-adic Chevalley groups. **80f:22018**

Secondary classifications:

Chiswell, I. M. The Bass-Serre theorem revisited. **(80j:20046)**
Duposcheel, Luc How to use induced representations. **(80c:22010)**
Howe, Roger E. (*with* Moore, Calvin C.) Asymptotic properties of unitary representations. **(80g:22017)**
Jacquet, Hervé (*with* Piatetski-Shapiro, I. I.; Shalika, Joseph) Automorphic forms on GL(3). I. **(80i:10034a)**
(*with* Piatetski-Shapiro, I. I.; Shalika, Joseph) Automorphic forms on GL(3). II. **(80i:10034b)**
Martin, Robert P. Tensor products for SL(2, k). **(80i:22033)**
Moore, Calvin C. *See* **Howe, Roger E.**, **(80g:22017)**
Piatetski-Shapiro, I. I. *See* **Jacquet, Hervé; et al.**, **(80i:10034a)** *and* **Jacquet, Hervé; et al.**, **(80i:10034b)**
Shalika, Joseph *See* **Jacquet, Hervé; et al.**, **(80i:10034a)** *and* **Jacquet, Hervé; et al.**, **(80i:10034b)**

22E55 Representations of Lie and linear algebraic groups over global fields and adèle rings [See also 20G05.]

Secondary classifications:

Arthur, James G. A trace formula for reductive groups. I. Terms associated to classes in $G(\mathbf{Q})$. **(80d:10043)**
Haris, Stephen J. Complete reducibility of admissible representations over function fields. **(80i:12012)**
Jacquet, Hervé (*with* Piatetski-Shapiro, I. I.; Shalika, Joseph) Automorphic forms on GL(3). I. **(80i:10034a)**
(*with* Piatetski-Shapiro, I. I.; Shalika, Joseph) Automorphic forms on GL(3). II. **(80i:10034b)**
Piatetski-Shapiro, I. I. *See* **Jacquet, Hervé; et al.**, **(80i:10034a)** *and* **Jacquet, Hervé; et al.**, **(80i:10034b)**
Shahidi, Freydoon Modular forms and L-functions for GL_2. **(80g:12008)**
Shalika, Joseph *See* **Jacquet, Hervé; et al.**, **(80i:10034a)** *and* **Jacquet, Hervé; et al.**, **(80i:10034b)**

22E60 Lie algebras of Lie groups (For the algebraic theory of Lie algebras, see 17Bxx.)

Gould, M. D. The characteristic identities and reduced matrix elements of the unitary and orthogonal groups. **80e:22021**
Wall, G. E. A formula in noncommutative differential calculus. **80g:22018a**
A formula in noncommutative differential calculus. II. **80g:22018b**

Secondary classifications:

Cornwell, J. F. Direct determination of the Langlands decompositions for the parabolic subalgebras of noncompact semisimple real Lie algebras. **(80g:22012)**
Dixmier, Jacques Champs de vecteurs adjoints sur les groupes et algèbres de Lie semi-simples. **(80i:17011)**
Doi, Hideo Nonexistence of torsion free flat connections on reductive homogeneous spaces. **(80f:53032)**
Helgason, Sigurdur ★Differential geometry, Lie groups, and symmetric spaces. **(80k:53081)**
van den Hombergh, Adolf (*with* de Vries, H.) On the differential operators on the quasi-affine variety G/N. **(80c:17011)**
Lukáč, I. (*with* Smorodinskiĭ, Ja. A.) On the algebra of Gell-Mann matrices for the SU(3) group. **(80d:81133)**
Matsushima, Hiroshi (*with* Okamoto, Kiyosato) Nonexistence of torsion free flat connections on a real semisimple Lie group. **(80f:53026)**
Okamoto, Kiyosato *See* **Matsushima, Hiroshi**, **(80f:53026)**
Palev, Čavdar Fixed order matrix elements of the para-Fermi operators. **(80f:81042)**
Lie algebraic aspects of quantum statistics. Para-Fermi statistics. **(80f:81051)**
Smorodinskiĭ, Ja. A. *See* **Lukáč, I.**, **(80d:81133)**
de Vries, H. *See* **van den Hombergh, Adolf**, **(80c:17011)**

22E65 Infinite-dimensional Lie groups and their Lie algebras [See also 17B65, 58B25, 58H05.]

Bayen, François On the convergence of the Zassenhaus formula. **80h:22022**
Delorme, P. Irreductibilité de certaines représentations de $G^{(X)}$. **80a:22022**
de la Harpe, Pierre Simplicity of the projective unitary groups defined by simple factors. **80h:22023**
(*with* Plymen, R. J.) Automorphic group representations: a new proof of Blattner's theorem. **80g:22022**
Hoc, B. S. The group of local analytic homeomorphisms of the line and P-groups. (Russian) **80g:22019**
Kostant, Bertram Harmonic analysis on graded (or super) Lie groups. **80a:22023**
Ol'shanskiĭ, G. I. Unitary representations of the infinite-dimensional classical groups $U(p,\infty)$, $SO_0(p,\infty)$, $Sp(p,\infty)$, and of the corresponding motion groups. (Russian) **80g:22020**
Plymen, R. J. Some recent results on infinite-dimensional spin groups. **80g:22021**
See also **de la Harpe, Pierre**, **80g:22022**

Secondary classifications:

Agrachev, A. A. (*with* Gamkrelidze, R. V.) Exponential representation of flows and a chronological enumeration. (Russian) **(80g:49036)**
Albeverio, Sergio (*with* Hoegh-Krohn, Raphael) Topics in infinite dimensional analysis. **(80g:58018)**
(*with* Hoegh-Krohn, Raphael) The energy representation of Sobolev-Lie groups. **(80i:58017)**
Anastasie, Mihai Spin structures on Hilbert manifolds. **(80g:58011)**
Baaklini, N. S. (*with* Salam, Abdus) Nonmetrical supergravity for a spin-two nonet. **(80i:83019)**
Bergmann, Peter G. (*with* Komar, Arthur B.) Modified supersymmetries. **(80a:81125)**
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(*with* Simmons, L. M., Jr.) Coherent states for general potentials. III. Nonconfining one-dimensional examples. (80i:81067c)

Nikitin, A. G. *See* **Fuščič, V. I.**, (80b:81044) *and* **Fuščič, V. I.**, (80c:81035)

Nuyts, J. *See* **Brihaye, Y.; et al.**, (80c:81077)

Ogievetskiĭ, V. I. (*with* Sokačev, E. S.) Structure of supergravity group. (80m:83011)

Okubo, Susumu Structure of semi-simple gauge groups for unified weak and electromagnetic interactions. (80a:81102)
Representations and classifications of compact gauge groups for unified weak and electromagnetic interactions. (80c:81119)

Olesen, P. *See* **Nielsen, N. K.**, (80b:81077)

Omojola, Akin F. Spin summations in nuclear scattering problems. (80a:81098)

Osterwalder, Konrad (*with* Seiler, Erhard) Lattice gauge theories. (80c:81083)

Oziewicz, Z. *See* **Ablamowicz, R.; et al.**, (80d:81031)

Palev, Čavdar Fixed order matrix elements of the para-Fermi operators. (80f:81042)
Lie algebraic aspects of quantum statistics. Para-Fermi statistics. (80f:81051)

Papastamatiou, N. J. *See* **Fujimoto, Y.**, (80a:81110a) *and* **Fujimoto, Y.**, (80a:81110b)

Patera, J. *See* **Lemire, F.**, (80g:22013)

(Perelomov, A. P.) *See* **Gibson, W. M.; et al.**, (80m:81002)

Perroud, M. *See* **Daumens, M.**, (80i:81016)

Pervušin, V. N. *See* **Kazakov, D. I.; et al.**, (80j:81051)

Pessa, Eliano The group of rotations of E_6 and conformal transformations. (Italian. English summary) (80c:53007)

Pollard, B. R. *See* **Gibson, W. M.**, (80m:81002)

Pons, J. M. *See* **Gomis, J.**, (80a:17007a) *and* **Gomis, J.**, (80a:17007b)

Preparata, G. (*with* Szegö, K.) Baryon structure in quark geometrodynamics. (Italian and Russian summaries) (80a:81101)

Prosperi, D. *See* **Camiz, P.; et al.**, (80b:81106)

Puškin, S. V. *See* **Kazakov, D. I.; et al.**, (80j:81051)

Quirós, M. *See* **León, J.; et al.**, (80a:81036) *and* **León, J.; et al.**, (80g:81026)

Rączka, Ryszard *See* **Budini, Paolo; et al.**, (80a:81103) *and* **Budini, Paolo; et al.**, (80g:81073)

Ramírez Mittelbrunn, J. *See* **León, J.; et al.**, (80a:81036) *and* **León, J.; et al.**, (80g:81026)

Ramond, P. *See* **Gell-Mann, M.; et al.**, (80c:81116)

Restuccia, A. *See* **Aragone, C.**, (80a:83028)

Righi, R. (*with* Venturi, G.; Zamiralov, V.) A nonabelian gauge theory in a nonlinear gauge. (Italian and Russian summaries) (80d:81092)

Ringhofer, Klaus Koornwinder's polynomials and representations of the conformal group. (80g:81028)

Robb, Michael A. *See* **Hegarty, Dermot**, (80m:81108)

Rohrlich, F. Relativistic Hamiltonian dynamics. I. Classical mechanics. (80e:83029)

Ronveaux, André *See* **Gazeau, J. P.; et al.**, (80h:81027)

de Roo, M. *See* **Meyers, C.; et al.**, (80f:81070)

Rosensteel, G. *See* **Rowe, D. J.**, (80d:81134)

Roskies, Ralph *See* **Anandan, J.**, (80d:81117)

Rowe, D. J. (*with* Rosensteel, G.) The nuclear collective model and the symplectic group. (80d:81134)

Rzewuski, Jan *See* **Ablamowicz, R.; et al.**, (80d:81031)

Sabaliauskas, L. The maximal restriction of the basis for the description of the nuclear states. (Russian. Lithuanian and English summaries) (80e:81101)

Salam, Abdus *See* **Baaklini, N. S.**, (80i:83019)

Saliu, L. *See* **Gherman, O.**, (80d:81120)

Saller, H. *See* **Dürr, H.-P.**, (80d:81129)

Sannikov, S. S. Equations for fields with complex spin. (Russian. English summary) (80a:81057)

Sasaki, R. Some classical solutions of the sourceless SO(4, 1) gauge field equations. (80g:81055)

Sattinger, D. H. Bifurcation from rotationally invariant states. (80j:58027)

Schwarzenbach, H. *See* **Fässler, A.**, (80h:22005)

Seiler, Erhard *See* **Osterwalder, Konrad**, (80c:81083)

Seligman, T. H. *See* **Moshinsky, Marcos**, (80c:81044)

Senjanović, Goran *See* **Mohapatra, R. N.**, (80a:81053)

Sharan, Pankaj Star-product representation of path integrals. (80k:81046)

Sienkiewicz, W. *See* **Lukierski, Jerzy**, (80k:81103)

Šijački, Djordje *See* **Ne'eman, Yuval**, (80i:81060)

Simmons, L. M., Jr. *See* **Nieto, Michael Martin**, (80i:81067a); **Nieto, Michael Martin**, (80i:81067b) *and* **Nieto, Michael Martin**, (80i:81067c)

Sinivee, V. A group-theoretic approach to the dynamics of multispin systems. V. (Russian. Estonian and English summaries) (80b:81046)

Sirokov, V. A. *See* **Gavrilik, O. M.**, (80e:81100)

Slansky, R. *See* **Gell-Mann, M.; et al.**, (80c:81116)

Slavnov, A. A. Supersymmetric gauge theories and their possible applications to the weak and electromagnetic interactions. (80c:81120)

Sloosman, S. B. Decrease of correlations in two-dimensional models with continuous group symmetry. (Russian. English summary) (80f:81073)

Smirnov, Ju. F. *See* **Ašerova, R. M.; et al.**, (80c:81124)

Smorodinskiĭ, Ja. A. The Clebsch-Gordan coefficients, the d-function of SU(2), and their symmetry. (80c:81122)

So, S. I. (*with* Strottman, D.) Wigner coefficients for $SU(6) \supset SU(3) \otimes SU(2)$. (80b:81047)

Sofi, G. O. *See* **Ahmad, M.**, (80e:81099)

Sokačev, E. S. *See* **Ogievetskiĭ, V. I.**, (80m:83011)

Sokolik, G. A. Geometrical description of fields. (Italian and Russian summaries) (80g:81036)

Sokolov, S. N. Relativistic addition of direct interactions in the point form of dynamics. (Russian. English summary) (80d:81021)

Šondin, Ju. G. Fourier expansion, connected with the Lorentz group, in the function space with support outside the light cone. (Russian. English summary) (80c:81068)

Sorace, E. *See* **Barducci, A.; et al.**, (80d:83036)

Sorba, P. *See* **Meyers, C.; et al.**, (80f:81070)

Sorin, A. S. *See* **Ivanov, E. A.**, (80j:83017)

Souček, J. Quaternion quantum mechanics as the description of tachyons and quarks. (80d:81101)

Speh, Birgit Degenerate series representations of the universal covering group of SU(2, 2). (80j:22017)

Steczko, G. *See* **Kustov, E. F.; et al.**, (80h:82033)

Stražev, V. I. *See* **Kruglov, S. I.**, (80j:81098)

Streater, R. F. *See* **Basarab-Horwath, P.; et al.**, (80k:81217)

Strottman, D. Evaluation of $SU(6) \supset SU(3) \otimes SU(2)$ Wigner coefficients. (80f:81045)
See also **So, S. I.**, (80b:81047)

Suranyi, Peter Classical, cross-section generating solutions of field equations. (80i:81063)

Šustov, A. P. *See* **Ašerova, R. M.; et al.**, (80c:81124)

Szczepaniak, B. *See* **Lulek, B.; et al.**, (80i:81073a)

Szegö, K. *See* **Preparata, G.**, (80a:81101)

Szpikowski, Stanisław *See* **Góźdź, Andrzej**, (80k:81178)

Taylor, John G. Towards a geometrization of nature. (80d:83067)

Timofeevskaja, O. D. Quantization in the neighborhood of the classical solution in nonlinear O(3)-invariant theory. (Russian. English summary) (80k:81139)

Tolstoi, V. N. *See* **Ašerova, R. M.; et al.**, (80c:81124)

Truskova, N. F. Elementary solutions of the quantum-mechanical two-center problem and representations of the group $O(4) \otimes O(2, 2)$. (80j:81031)

Vasil'ev, M. A. *See* **Fradkin, E. S.**, (80d:83059)

Venturi, G. *See* **Righi, R.; et al.**, (80d:81092)

Verdiev, İ. A. ★Инварианты представлений групп Лоренца и их применение в дуальной модели физики частиц. (Russian) [Invariants of the representations of Lorentz groups and their applications in the dual model of particle physics] (80j:81083)
See also **Kerimov, G. A.**, (80h:22017)

Weisz, P. *See* **Berg, B.**, (80h:81025)

Wen, Zhen Yi A unitary group method for strong crystal fields with eightfold symmetry. (Chinese. English summary) (80b:81114)

Williams, David N. Instability of the existence of nonabelian vector potentials. (80h:81053)

de Wit, Bernard (*with* van Holten, J. W.) Multiplets of linearized SO(2) supergravity. (80g:83041)

Witten, E. θ-vacua in two-dimensional quantum chromodynamics. (Italian and Russian summaries) (80k:81113)

Witten, Louis Symmetries of the self-dual SU(2) gauge fields. (80a:81058)

Wolbarst, A. B. An intuitive approach to group representation theory. II. (80g:81085)

Wolf, Kurt Bernardo The Airy function as a nonsubgroup basis for the oscillator representation $(D^+_{1/4} + D^+_{3/4})$ of SL(2, R). (80k:81023)

Wong, M. K. F. (*with* Yeh, Hsin Yang) Explicit evaluation of the representation functions of ISO(n). (80m:81035)

Wright, J. *See* **Basarab-Horwath, P.; et al.**, (80k:81217)

Wu, Yong Shi (*with* Chen, Shi; Du, Dong Sheng; Guo, Han Ying) Monopoles in the broken SO_3 and SU_2 gauge theories. (Chinese) (80g:81056)

Wybourne, B. G. *See* **Butler, P. H.; et al.**, (80e:81098)

Xian, Ding Chang (*with* Guo, Shuo Hong; Li, Hua Zhong) On the problem of dual charge (magnetic monopole) in nonabelian gauge groups. (80h:81062)

Yates, R. G. *See* **Brihaye, Y.; et al.**, (80c:81077)

Yeh, Hsin Yang *See* **Wong, M. K. F.**, (80m:81035)

Zaharov, N. A. *See* **Kustov, E. F.; et al.**, (80h:82033)

Zamiralov, V. *See* **Righi, R.; et al.**, (80d:81092)

22E99 None of the above, but in this section

Blanc, Philippe Sur la cohomologie continue des groupes localement compacts. 80k:22009

Chern, Shiing Shen (*with* Peng, Jia Gui) Lie groups and KdV equations. 80h:22025

Dupont, J. L. (*with* Guichardet, A.) À propos de l'article: "Sur la cohomologie réelle des groupes de Lie simples réels" [Ann. Sci. Ecole Norm. Sup. (4) **11** (1978), no. 2, 277–292] par Guichardet et D. Wigner. (English summary) 80g:22023b

Guichardet, A. (*with* Wigner, David) Sur la cohomologie réelle des groupes de Lie simples réels. (English summary) 80g:22023a
See also **Dupont, J. L.**, 80g:22023b

Luna, D. Remarques sur un article de J. W. Robbin: "Lie algebras of infinitesimal norm isometries" (Linear Algebra and Appl. **10** (1975), 95–102). 80a:22026

Peng, Jia Gui *See* **Chern, Shiing Shen**, 80h:22025

Pesenson, I. Z. Interpolation spaces on Lie groups. (Russian) 80j:22021

(Robbin, Joel W.) *See* **Luna, D.**, 80a:22026

Wigner, David *See* **Guichardet, A.**, 80g:22023a *and* **Dupont, J. L.; et al.**, 80g:22023b

Secondary classifications:

Baillieul, J. Geometric methods for nonlinear optimal control problems. (80i:49023)

(Branin, F. H., Jr.) *See* **Problem analysis in science and engineering.** (80h:00004)

Glassey, Robert T. (*with* Strauss, Walter Alexander) Decay of a Yang-Mills field coupled to a scalar field. **(80d:81071)**
Harrison, D. K. Double coset and orbit spaces. **(80j:51010)**
(Huseyin, K.) *See* **Problem analysis in science and engineering. (80h:00004)**
Kamefuchi, S. *See* **Omote, M., (80h:81041)**
Omote, M. (*with* Kamefuchi, S.) On supergroup transformations. (Italian and Russian summaries) **(80h:81041)**
Skordev, G. S. The shape of compact, connected and finite-dimensional groups. (Russian) **(80k:55038)**
Strauss, Walter Alexander *See* **Glassey, Robert T., (80d:81071)**
Conference:
Problem Analysis in Science and Engineering *See* **Problem analysis in science and engineering, (80h:00004)**
Problem analysis in science and engineering ★Problem analysis in science and engineering. **(80h:00004)**
Waterloo, Ont. *See* **Problem analysis in science and engineering, (80h:00004)**

26-XX REAL FUNCTIONS [See also 54C30.]

26-01 Elementary exposition, textbooks

Bartle, Robert G. ★Introducción al análisis matemático. (Spanish) [Introduction to mathematical analysis] **80m:26001**
Bullen, P. S. A chapter on inequalities. **80g:26001**
Corwin, Lawrence J. (*with* Szczarba, Robert H.) ★Calculus in vector spaces. **80f:26001**
(Díaz Barriga Casales, Alejandro Javier) *See* **Bartle, Robert G., 80m:26001**
Endl, Kurt (*with* Luh, Wolfgang) ★Analysis. I. **80e:26001a**
(*with* Luh, Wolfgang) ★Analysis. II. **80e:26001b**
(*with* Luh, Wolfgang) ★Analysis. III. **80e:26001c**
Fihtengol'c, G. M. ★Differential- und Integralrechnung. II. **80f:26001**
Fischer, Wolfgang *See* **Grauert, Hans, 80d:26001**
Gel'fand, M. B. *See* **Kovalenko, V. G.; et al., 80i:26002**
Grauert, Hans (*with* Fischer, Wolfgang) ★Differential- und Integralrechnung. II. **80d:26001**
(Gutiérrez González, Ma. Cristina) *See* **Bartle, Robert G., 80m:26001**
Hille, Einar ★Analysis. Vol. I. **80m:26002a**
★Analysis. Vol. II. **80m:26002b**
Il'in, V. A. (*with* Sadovničiĭ, V. A.; Sendov, Blagovest) ★Математический анализ. (Russian) [Mathematical analysis] **80h:26001**
Kleiner, Witold ★Zarys analizy matematycznej. (Polish) [Survey of mathematical analysis] **80d:26002**
Kovalenko, V. G. (*with* Gel'fand, M. B.; Ušakov, R. P.) ★Доведения нерівностей. (Ukrainian) [Proving inequalities] **80i:26002**
Luh, Wolfgang *See* **Endl, Kurt, 80e:26001a; Endl, Kurt, 80e:26001b** *and* **Endl, Kurt, 80e:26001c**
(Mai, Brigitte) *See* **Fihtengol'c, G. M., 80f:26001**
(Mai, Walter) *See* **Fihtengol'c, G. M., 80f:26001**
Mihailović, D. (*with* Tošić, D. Đ.) ★Elementi matematičke analize. II. (Serbo-Croatian) [Elements of mathematical analysis. II] **80g:26002**
Pavlović, S. V. Über eine Erweiterung der Formel von Stirling. **80g:26003**
Priestley, William McGowen ★Calculus: an historical approach. **80m:26003**
Rešetnjak, Ju. G. ★Введение в теорию интеграла Лебега. (Russian) [Introduction to the theory of the Lebesgue integral] **80j:26001**
Sadovničiĭ, V. A. *See* **Il'in, V. A.; et al., 80h:26001**
Schwartz, Laurent ★Kurs analizy matematycznej. Tom I. (Polish) [A course on mathematical analysis. Vol. I] **80m:26004**
Sendov, Blagovest *See* **Il'in, V. A.; et al., 80h:26001**
Szczarba, Robert H. *See* **Corwin, Lawrence J., 80f:26001**
Tošić, D. Đ. *See* **Mihailović, D., 80g:26002**
(Tr.jdos, Tadeusz) *See* **Schwartz, Laurent, 80m:26004**
Ušakov, R. P. *See* **Kovalenko, V. G.; et al., 80i:26002**

Secondary classifications:

Sydsaeter, Knut ★Matematisk analyse. Bind II. (Norwegian) [Mathematical analysis. Vol. II] **(80c:00004)**

26-02 Advanced exposition (research surveys, monographs, etc.)

Bruckner, Andrew M. ★Differentiation of real functions. **80h:26002**
Bullen, P. S. *See* **Mitrinović, Dragoslav S.; et al., 80b:26001**
Mitrinović, Dragoslav S. (*with* Bullen, P. S.; Vasić, P. M.) Means and inequalities connected with them. I. (Serbo-Croatian. English summary) **80b:26001**
Vasić, P. M. *See* **Mitrinović, Dragoslav S.; et al., 80b:26001**

26-03 Historical (must also be assigned at least one classification number from Section 01)

Boas, Ralph P. Extremal problems for polynomials. **80d:26003**

Secondary classifications:

(Cauchy, Augustin Louis) *See* **Fisher, Gordon M., (80j:01015)**
Cleave, John P. The concept of "variable" in nineteenth century analysis. **(80j:01016)**
Fisher, Gordon M. Cauchy's variables and orders of the infinitely small. **(80j:01015)**
Juškevič, A. P. Conceptions of Newton and Leibniz of the calculation of infinitesimals. (Russian) **(80g:01009)**
Katz, Victor J. The history of Stokes' theorem. **(80j:01018)**
(Leibniz, Gottfried Wilhelm) *See* **Juškevič, A. P., (80g:01009)**
(Newton, Isaac) *See* **Juškevič, A. P., (80g:01009)**
(al-Qazwini) *See* **Tee, Garry J., (80d:01009b)**
(Saliba, George) *See* **Tee, Garry J., (80d:01009b)**
Schneidler, David A bibliographical note on a theorem of Hardy, Littlewood, and Pólya. **(80c:90023)**
Tee, Garry J. Letter to the editor: "Computational techniques in a set of late medieval astronomical tables" (J. Hist. Arabic Sci. 1 (1977), 24–32) by George Saliba. **(80d:01009b)**

26-04 Explicit machine computation and programs (not the theory of computation or programming)

26-06 Proceedings, conferences, etc.

(Choquet, Gustave) *See* **Séminaire: Choquet, 80c:26001a** *and* **Séminaire: Choquet, 80c:26001b**
Analysis *See* **Séminaire: Choquet, 80c:26001a** *and* **Séminaire: Choquet, 80c:26001b**
Séminaire:
Choquet ★Séminaire Choquet. 17e année: 1977/78. Initiation à l'analyse. Fasc. 1: Exposés 1 à 15. **80c:26001a**
Choquet ★Séminaire Choquet. 17e année: 1977/78. Initiation à l'analyse. Fasc. 2: Exposés 16 à 25, Communications C1 à C14, et Index cumulatif, 1re à 17e années. **80c:26001b**

26Axx Functions of one variable

26A03 Foundations: limits and generalizations, elementary topology of the line

Pu, H. W. (*with* Pu, Huo Hui Min) On the approximate maxima of a function. **80i:26003**
Pu, Huo Hui Min *See* **Pu, H. W., 80i:26003**
Wilczyński, Władysław Topologies and classes of continuous real functions of a real variable. **80c:26002**

Secondary classifications:

Hawkins, Bill John Napier (1550–1617). The great Scot! **(80m:01022)**
(Napier, John) *See* **Hawkins, Bill, (80m:01022)**
Biography:
Napier, John *See* **Hawkins, Bill, (80m:01022)**

26A06 One-variable calculus

Grossman, Michael ★The first nonlinear system of differential and integral calculus. **80m:26005**
Jasiulionis, A. A certain application of matrices in differential calculus and differential equations. (Russian. Lithuanian and English summaries) **80f:26002**
Pavelle, Richard The Planck integral cannot be evaluated in terms of a finite series of elementary functions. **80k:26001**

26A09 Elementary functions

Stauffer, Barbara M. A special fifth degree polynomial. **80g:26004**

Secondary classifications:

Strahov, V. N. Solution of a direct two-dimensional gravimetry problem. (Russian) **(80i:86007)**

26A12 Rate of growth of functions, orders of infinity, slowly increasing functions [See also 26A48.]

Secondary classifications:

Bingham, N. H. (*with* Teugels, J. L.) Tauberian theorems and regular variation. **(80g:40006)**
de Haan, Laurens (*with* Resnick, Sidney I.) Derivatives of regularly varying functions in R^d and domains of attraction of stable distributions. **(80g:26020)**
Higgins, Rada More in the theory of sequences. **(80m:40001)**
Pakes, Anthony G. The characterization of series amenable to ratio tests. **(80m:40002)**
Resnick, Sidney I. *See* **de Haan, Laurens, (80g:26020)**
Rogozin, B. A. (*with* Sgibnev, M. S.) Banach algebras of absolutely continuous measures on the line. (Russian) **(80f:43007)**
Sgibnev, M. S. *See* **Rogozin, B. A., (80f:43007)**
Teugels, J. L. *See* **Bingham, N. H., (80g:40006)**

26A15 Continuity and related questions (modulus of continuity, semicontinuity, discontinuities, etc.) {For properties determined by Fourier coefficients, see 42A16; for those determined by approximation properties, see 41A25.}

Ceder, J. G. (*with* Pearson, T. L.) More on Darboux points of real functions. **80d:26004**
Cignoli, R. (*with* Hounie, Jorge G.) Functions with arbitrarily small periods. **80i:26004**
Farková, Jana A class of subadditively continuous real functions. (Russian summary) **80e:26003**
Grande, Zbigniew Sur la r-continuité des fonctions de deux variables. **80g:26005**
Sur le prolongement des fonctions. **80i:26005**
(*with* Stawikowska, S.) La semicontinuité et la propriété de Baire. (English summary) **80h:26003**
Hounie, Jorge G. *See* **Cignoli, R., 80i:26004**

Judin, V. A. The modulus of continuity in L_2. (Russian) **80j:26002**
Koljada, V. I. Essential continuity of summable functions. (Russian) **80k:26002**
Laczkovich, M. A note on approximately continuous and a.e. continuous functions. **80g:26007**
Lipiński, Jan Stanisław On Darboux points. (Russian summary) **80e:26004**
Malý, Jan A note on separation of sets by approximately continuous functions. **80h:26004**
O'Malley, R. J. Approximately continuous functions which are continuous almost everywhere. **80g:26006**
Pearson, T. L. *See* **Ceder, J. G., 80d:26004**
Sapilldi, T. M. A correlation between moduli of continuity. (Russian) **80k:26003**
Stawikowska, S. *See* **Grande, Zbigniew, 80h:26003**

Secondary classifications:

Geman, Donald Dispersion points for linear sets and approximate moduli for some stochastic processes. **(80i:28004)**
Guseinov, E. G. Imbedding theorems for classes of continuous functions. (Russian. Azerbaijani and English summaries) **(80m:46028)**
Koszela, B. (*with* Świątkowski, T.; Wilczyński, Władysław) Classes of continuous real functions. **(80g:54018)**
Mišík, Ladislav Halbborelsche Funktionen und extreme Ableitungen. (Russian summary) **(80f:26004)**
Świątkowski, T. *See* **Koszela, B.; et al., (80g:54018)**
Wilczyński, Władysław *See* **Koszela, B.; et al., (80g:54018)**

26A16 Lipschitz (Hölder) classes

Chan, Ling Yau Some properties of asymptotic functions and their applications. **80a:26001**
Dufner, Julius Eine Charakterisierung Lipschitz-stetiger Funktionen durch konvergente Folgen. **80k:26004**
Huggins, Frank N. Generalized Lipschitz conditions. **80b:26002a**
Generalized Lipschitz conditions. II. **80b:26002b**
Neugebauer, C. J. Strong differentiability of Lipschitz functions. **80c:26002**

Secondary classifications:

Bahadur, Lal (*with* Nijhawan, R. R.; Pandya, G. P.) Banach space of vector valued Lipschitz functions. **(80h:46049)**
Hager, William W. Lipschitz continuity for constrained processes. **(80d:49022)**
Lebourg, Gérard Generic differentiability of Lipschitzian functions. **(80i:58012)**
Nijhawan, R. R. *See* **Bahadur, Lal; et al., (80h:46049)**
Pandya, G. P. *See* **Bahadur, Lal; et al., (80h:46049)**

26A18 Iteration [See also 39B10, 47H10, 54H25.]

Boyarsky, Abraham *See* **Scarowsky, Manny; et al., 80m:26006**
Fuglister, Frederick J. A note on chaos. **80f:26003**
Korec, Ivan On a problem of V. Pták. (Czech summary) **80e:26005**
Proppe, Harold *See* **Scarowsky, Manny; et al., 80m:26006**
Scarowsky, Manny (*with* Boyarsky, Abraham; Proppe, Harold) Some properties of piecewise linear expanding maps. **80m:26006**

Secondary classifications:

Allwright, D. J. Functions that increase cross-ratios; with applications to recurrence relations and differential equations. **(80j:26004)**
Sablik, Maciej On iterates of multi-hat functions. (Polish summary) **(80e:39002)**
Straffin, Philip D., Jr. Periodic points of continuous functions. **(80h:58043)**

26A21 Classification of real functions; Baire classification of sets and functions [See also 04A15, 28A05, 54C50.]

Császár, Á. (*with* Laczkovich, M.) Some remarks on discrete Baire classes. **80d:26005**
Laczkovich, M. *See* **Császár, Á., 80d:26005**
Mišík, Ladislav Halbborelsche Funktionen und extreme Ableitungen. (Russian summary) **80f:26004**

Secondary classifications:

Ceder, J. G. (*with* Pearson, T. L.) More on Darboux points of real functions. **(80d:26004)**
Lipiński, Jan Stanisław On Darboux points. (Russian summary) **(80e:26004)**
Pearson, T. L. *See* **Ceder, J. G., (80d:26004)**
Tsurumi, K. On spaces of Baire functions over nonarchimedean valued fields. **(80c:54011)**

26A24 Differentiation (functions of one variable): general theory, generalized derivatives, mean-value theorems [See also 28A15.]

Abian, Alexander An ultimate proof of Rolle's theorem. **80g:26008**
Aversa, V. (*with* Wilczyński, Władysław) A condition for differentiability with respect to a continuous function. (Italian. English summary) **80k:26005**
Belna, Charles (*with* Evans, Michael J.; Humke, Paul D.) Symmetric and ordinary differentiation. **80d:26006**
(*with* Evans, Michael J.; Humke, Paul D.) Symmetric and strong differentiation. **80b:26003**
Bhakta, P. C. (*with* Mukhopadhyay, D. K.) On approximate strong and approximate uniform differentiability. **80g:26009**
Boas, Ralph P. (*with* Pollard, H.; Widder, D. V.) The asymptotic behavior of derivatives. **80b:26004**
Bose, M. K. On approximately continuous function. **80j:26003**
Cannizzo, Aurelio (*with* Valenti, Santi) On some derivability conditions, applicable to sets of measure zero. (Italian. French summary) **80h:26005**
Chakrabarti, P. S. On properties of Peano derivates. **80h:26006**
Evans, Michael J. *See* **Belna, Charles; et al., 80b:26003** *and* **Belna, Charles; et al., 80d:26006**
Fleissner, Richard J. (*with* Foran, James) Transformations of differentiable functions. **80d:26007**
Foran, James *See* **Fleissner, Richard J., 80d:26007**
Haruki, Shigeru A property of quadratic polynomials. **80g:26010**
Humke, Paul D. *See* **Belna, Charles; et al., 80b:26003** *and* **Belna, Charles; et al., 80d:26006**
Kulbacka, Elżbieta Sur l'ensemble des points où existent les dérivées de tous les ordres. (English and Russian summaries) **80g:26011**
Laczkovich, M. On the absolute Peano derivatives. **80g:26012**
(*with* Petruska, Gy.) On the transformers of derivatives. **80b:26005**
Laursen, Kjeld Bagger Can one differentiate in more than one way? (Danish. English summary) **80i:26006**
Leach, E. B. (*with* Sholander, M. C.) Corrections to: "Extended mean values" [Amer. Math. Monthly **85** (1978), no. 2, 84–90; MR **58** #22428]. **80k:26006**
Mišík, Ladislav Extreme unilateral essential derivatives of continuous functions. **80b:26006**
Mukhopadhyay, D. K. *See* **Bhakta, P. C., 80g:26009**
Petrušev, P. P. *See* **Sendov, Blagovest; et al., 80i:26008**
Petruska, Gy. *See* **Laczkovich, M., 80b:26005**
Pollard, H. *See* **Boas, Ralph P.; et al., 80b:26004**
Preiss, David Maximoff's theorem. **80m:26007**
Pu, H. W. (*with* Pu, Huo Hui Min) On iterated Peano derivatives. **80i:26007**
See also **Pu, Huo Hui Min, 80d:26008**
Pu, Huo Hui Min (*with* Pu, H. W.) An approximative generalization of Zahorski's theorem on derivative. **80d:26008**
See also **Pu, H. W., 80i:26007**
Šalát, Tibor On Pompeiu functions and functions of the type P_1. **80h:26007**
Sendov, Blagovest (*with* Tašev, Spas P.; Petrušev, P. P.) Characterization of S-derivatives of Lipschitzian functions. (Russian) **80i:26008**
Sholander, M. C. *See* **Leach, E. B., 80k:26006**
Tašev, Spas P. *See* **Sendov, Blagovest; et al., 80i:26008**
Trohimčuk, Ju. Ju. Differential properties of functions. (Russian) **80i:26009**
Valenti, Santi *See* **Cannizzo, Aurelio, 80h:26005**
Widder, D. V. *See* **Boas, Ralph P.; et al., 80b:26004**
Wilczyński, Władysław *See* **Aversa, V., 80k:26005**

Secondary classifications:

Bottazzini, Umberto Research of P. Tardy on differentials of arbitrary index, 1844–1868. (Italian. English summary) **(80g:01012)**
Bruckner, Andrew M. ★Differentiation of real functions. **(80h:26002)**
Dence, Thomas P. Differentiable points of the generalized Cantor function. **(80d:26010)**
Hauck, Jürgen Zum Zwischenwertsatz in der konstruktiven Analysis. (Russian, English and French summaries) **(80b:03098)**
Pour-El, M. B. (*with* Richards, Ian) Differentiability properties of computable functions—a summary. **(80d:03059)**
Richards, Ian *See* **Pour-El, M. B., (80d:03059)**
Skvorcov, V. A. (*with* Wade, W. R.) Generalization of some results concerning Walsh series and the dyadic derivative. (Russian summary) **(80i:42017)**
(Tardy, Placido) *See* **Bottazzini, Umberto, (80g:01012)**
Wade, W. R. *See* **Skvorcov, V. A., (80i:42017)**

26A27 Nondifferentiability (nondifferentiable functions, points of nondifferentiability), discontinuous derivatives

Secondary classifications:

Laczkovich, M. (*with* Petruska, Gy.) On the transformers of derivatives. **(80b:26005)**
Petruska, Gy. *See* **Laczkovich, M., (80b:26005)**
Zajíček, Luděk On the differentiation of convex functions in finite and infinite dimensional spaces. **(80h:46063)**

26A30 Singular functions, Cantor functions, functions with other special properties

Allwright, D. J. Functions that increase cross-ratios; with applications to recurrence relations and differential equations. **80j:26004**
Davison, T. M. K. A generalization of regulated functions. **80d:26009**
Dence, Thomas P. Differentiable points of the generalized Cantor function. **80d:26010**
Liu, Wen A class of locally recurrent functions. (Chinese) **80c:26003**
Takács, Lajos An increasing continuous singular function. **80f:26005**

Secondary classifications:

Bravo, Alejandro Concerning a result of Zahorski on the differentiability of functions. (Spanish) **(80i:26012)**
Yeh, R. Z. Measure-injective Borel functions. **(80b:60033)**

26A33 Fractional derivatives and integrals

Nishimoto, Katsuyuki Fractional differintegration of products. **80m:26008**
Fractional differintegration of the logarithmic function. **80m:26009**

Oldham, K. B. (*with* Spanier, J.) Fractional calculus and its applications. (Romanian summary) **80k:26007**
Rooney, P. G. On the ranges of certain fractional integrals. II. **80f:26006**
Spanier, J. *See* **Oldham, K. B., 80k:26007**
Tremblay, Richard Some operational formulas involving the operators xD, $x\Delta$ and fractional derivatives. **80g:26013**
Wong, R. Asymptotic expansions of fractional integrals involving logarithms. **80b:26007**

Secondary classifications:

Arestov, V. V. Inequalities for fractional derivatives on the half-line. **(80m:26013)**
Buslaev, A. P. (*with* Tihomirov, V. M.) Inequalities for derivatives in the multidimensional case. (Russian) **(80i:49009)**
Cheng, Min De (*with* Deng, Dong Gao) Fractional integration of periodic functions of several variables in the space L^p. (Chinese. English summary) **(80k:46043)**
Debnath, Lokenath Generalized calculus and its applications. **(80b:44001)**
Deng, Dong Gao *See* **Cheng, Min De, (80k:46043)**
Din' Zung (*with* Magaril-Il'jaev, G. G.) Bernste'n- and Favard-type problems and the mean E-dimension of some classes of functions. (Russian) **(80m:46024)**
Evseev, I. D. The domain of definition of fractional powers of ordinary differential operators in Hölder spaces with weight. (Russian) **(80f:47040)**
Magaril-Il'jaev, G. G. *See* **Din' Zung, (80m:46024)**
Mahmud, M. M. Perturbations of the operator of fractional integration. (Russian) **(80j:47061)**
McBride, Adam C. A theory of fractional integration for generalised functions. II. **(80g:46036)**
Mishra, Ramadhar Application of fractional q-integration to the theory of a generalized q-Stieltjes transform. **(80i:44006)**
Onneweer, C. W. Differentiation of fractional order on p-groups, approximation properties. (Russian summary) **(80m:43010)**
Fractional differentiation and Lipschitz spaces on local fields. **(80m:43012)**
Spyrou, N. Lie derivatives, Killing's equations, Gegenbauer polynomials: a combined use for the evaluation of some useful integrals. **(80e:33007)**
Tihomirov, V. M. *See* **Buslaev, A. P., (80i:49009)**
Wiener, Klaus Lösungen von Anfangswertproblemen bei Differentialgleichungen von nichtganzzahliger Ordnung. **(80d:34005)**

26A36 Antidifferentiation

26A39 Denjoy and Perron integrals, other special integrals

Bose, M. K. On Perron-Stieltjes and special Denjoy-Stieltjes integral. **80i:26010**
Candeloro, Domenico The Burkill-Cesari integral and its relation to absolute continuity. (Italian) **80g:26014**
Dutta, D. K. Cesàro-Perron-Stieltjes integral. **80j:26005**
Fiacca, Antonella On "quasi-additivity" and "quasi-subadditivity" with respect to two $(\mathcal{D}, \mathcal{D}')$ families of finite systems and to the δ mesh. (Italian. English summary) **80g:26015**
Goodman, Gerald S. N-functions and integration by substitution. (Italian summary) **80e:26006**
Henstock, R. Integration, variation and differentiation in division spaces. **80d:26011**
Kubota, Yôto The preponderantly continuous Denjoy integral. **80c:26004**

Secondary classifications:

Demuth, Oswald Constructive Denjoy integrals. (Russian) **(80k:03065)**
Salvadori, Anna Various concepts of "quasi-additivity". (Italian) **(80g:28011)**

26A42 Integrals of Riemann, Stieltjes and Lebesgue type [See also 28-XX.]

Ablan, Alexander On a useful economy in the formation of Riemann sums. **80i:26011**
Baker, James D. (*with* Dyer, James A.) A Stieltjes integral formula for Daniell functionals. **80m:26010**
Candeloro, Domenico (*with* Pucci, Patrizia) Some considerations regarding the Riemann-Stieltjes integral and the Weierstrass integral. (Italian. English summary) **80b:26008**
Darst, R. B. (*with* McShane, E. J.) The deterministic Itô-belated integral is equivalent to the Lebesgue integral. **80b:26009**
Dyer, James A. *See* **Baker, James D., 80m:26010**
Jensen, Shou Lin Lee (*with* White, John T.) Bounded slope variation and a generalized derivative. **80j:26006**
McShane, E. J. *See* **Darst, R. B., 80b:26009**
Mrose, Arnulf (*with* Ripka, W.) Die Intervalleigenschaft der Ober- und Untersummenmengen einer beschränkten Funktion. **80d:26012**
Pucci, Patrizia *See* **Candeloro, Domenico, 80b:26008**
Ripka, W. *See* **Mrose, Arnulf, 80d:26012**
Russell, A. M. Necessary and sufficient conditions for the existence of a generalized Stieltjes integral. **80f:26007**
White, John T. *See* **Jensen, Shou Lin Lee, 80j:26006**

Secondary classifications:

Bingham, N. H. (*with* Teugels, J. L.) Tauberian theorems and regular variation. **(80g:40006)**
Chatfield, J. A. A representation theorem for operators on a space of interval functions. **(80a:28007)**
Solution for an integral equation with continuous interval functions. **(80b:45022)**
Chong, Kong Ming On a fundamental theorem for expectation. **(80e:60027)**
Dutta, D. K. Cesàro-Perron-Stieltjes integral. **(80j:26005)**
Teugels, J. L. *See* **Bingham, N. H., (80g:40006)**

26A45 Functions of bounded variation, generalizations

Brandi, Primo Convergence in weighted variation and uniform convergence. (Italian. English summary) **80g:26016**
Convergence in variation with weight. Conditions of uniform and uniform almost everywhere convergence. (Italian. English summary) **80c:26005**
Bravo, Alejandro Concerning a result of Zahorski on the differentiability of functions. (Spanish) **80i:26012**
Fleissner, Richard J. (*with* Foran, James) A note on Λ-bounded variation. **80g:26017**
Foran, James *See* **Fleissner, Richard J., 80g:26017**
Giovannelli, Nicolò On an integral expression connected with the second variation on closed sets. (Italian) **80g:26018**
Gori Cocchieri, Candida The generalized weighted variation with applications to values in Banach spaces. (Italian. English summary) **80c:26006**
(*with* Ragni, Marcello) Properties of functions with bounded second variation in the generalized sense. (Italian. English summary) **80b:26010**
Gutowski, Mieczysław Über die Menge von Punkten, in denen die Ableitung der Sprungfunktion unendlich ist. **80b:26011**
Perlman, S. (*with* Waterman, Daniel) Some remarks on functions of Λ-bounded variation. **80e:26007**
Ragni, Marcello *See* **Gori Cocchieri, Candida, 80b:26010**
Russell, A. M. Further results on an integral representation of functions of generalised variation. **80a:26002**
Further comments on the variation function. **80i:26013**
Waterman, Daniel *See* **Perlman, S., 80e:26007**
Zalik, R. A. Functions of bounded variation with respect to a Tchebycheff system. **80f:26008**
Zlotnik, A. A. The selection principle for functions of bounded variation with values in a Banach space. (Russian. English summary) **80k:26008**

Secondary classifications:

Bruckner, Andrew M. A general convexity criterion. (Serbo-Croatian summary) **(80d:26014)**
Henstock, R. Integration, variation and differentiation in division spaces. **(80d:26011)**
Jensen, Shou Lin Lee (*with* White, John T.) Bounded slope variation and a generalized derivative. **(80j:26006)**
White, John T. *See* **Jensen, Shou Lin Lee, (80j:26006)**

26A46 Absolutely continuous functions

Foran, James A generalization of absolute continuity. **80m:26011**

Secondary classifications:

Fleissner, Richard J. (*with* Foran, James) Transformations of differentiable functions. **(80d:26007)**
Foran, James *See* **Fleissner, Richard J., (80d:26007)**

26A48 Monotonic functions, generalizations

Laczkovich, M. (*with* Petruska, Gy.) Differentiable functions have sparse graphs. **80b:26012**
Petruska, Gy. *See* **Laczkovich, M., 80b:26012**
Stoliński, Stanisław Some remarks on generalized monotonic type functions. **80h:26008**

26A51 Convexity, generalizations

Amir, Dan (*with* Ziegler, Zvi) Expansions of generalized completely convex functions. **80f:26009**
Behringer, Fred Alois On Karamardian's theorem about lower semicontinuous strictly quasiconvex functions. (German summary) **80d:26013**
Bruckner, Andrew M. A general convexity criterion. (Serbo-Croatian summary) **80d:26014**
Ferland, Jacques A. Matrix criteria for pseudoconvex functions in the class C^2. **80j:26007**
Lynch, James Sign changes of the difference of convex functions and their application to large deviation rates. **80b:26013**
Maruşciac, I. On *am*-convex functions. **80b:26014**
Mugler, Dale H. Completely convex functions and convergence. **80d:26015**
Ziegler, Zvi *See* **Amir, Dan, 80f:26009**

Secondary classifications:

Cipra, Tomáš Class of unimodal distributions and its transformations. (Czech and Russian summaries) **(80c:60023)**
El-Neweihi, Emad (*with* Proschan, Frank) Unified treatment of inequalities of the Weierstrass product type. **(80b:26027)**
Imoru, Christopher Olufunde A note on an inequality for the gamma function. **(80a:33001)**
Lions, Pierre-Louis Two remarks on the convergence of convex functions and monotone operators. **(80a:47084)**
Popoviciu, Elena Sur la convexité simultanée par rapport aux plusieurs ensembles interpolatoires. **(80i:41006)**
Proschan, Frank *See* **El-Neweihi, Emad, (80b:26027)**
Rabier, Patrick Étude d'un type d'équation fonctionnelle non linéaire. (English summary) **(80j:47085)**
Sander, Wolfgang Regularitätseigenschaften von Funktionalungleichungen. (English and Serbo-Croatian summaries) **(80h:39018)**
Stoliński, Stanisław Some remarks on generalized monotonic type functions. **(80h:26008)**

26A99 None of the above, but in this section

Secondary classifications:

Humke, Paul D. A note on connected coverings of the plane. **(80b:03089)**
Loeb, Peter A. An introduction to nonstandard analysis and hyperfinite probability theory. **(80m:60005)**

26Bxx Functions of several variables

26B05 Continuity and differentiation questions

Bongiorno, B. (*with* Vetro, P.) Gradients of Borel functions. **80i:26014**
Carrese, Rosalba On regularly and semiregularly differentiable functions. (Italian) **80b:26015**
Crouzeix, Jean-Pierre Sur la différentiabilité des fonctions quasiconvexes. (English summary) **80e:26008**
Guariglia, Emma The summability of the partial derivatives of a differentiable function. (Italian) **80c:26007**
Gupal, A. M. Properties of functions that satisfy a local Lipschitz condition. (Russian. English summary) **80c:26008**
Kolesnikov, S. V. Characterization of sets of discontinuity of functions with linearly continuous partial derivatives. (Russian) **80c:26009**
Leonard, Paul (*with* Münster, Michel) Exemple d'un opérateur de $\mathcal{D}$ dans C^∞ dont le noyau est séparément dans C^∞ sans être continu. (English summary) **80b:26016**
Münster, Michel *See* **Leonard, Paul, 80b:26016**
Rosenholtz, Ira There is no differentiable metric for $\mathbf{R}^n$. **80g:26019**
Rouch, Timothy Some sufficient conditions for regular approximate differentiability. **80h:26009**
Saint-Raymond, Jean Sur les fonctions munies de dérivées partielles. (English summary) **80h:26009**
Tao, L. N. On the material time derivative of arbitrary order. **80b:26017**
Vetro, P. *See* **Bongiorno, B., 80i:26014**
Wilczyńska, Urszula Approximate continuity of functions of two variables. **80j:26008**
Zibman, Israel Bernard Some characterizations of the n-dimensional Peano derivative. **80j:26009**

Secondary classifications:

Guariglia, Emma Functions that can be approximated by means of functions of the class C^m. (Italian) **(80e:41011)**
Kuczma, Marcin E. Differentiation of implicit functions and Steinhaus' theorem in topological measure spaces. **(80f:28017)**
Prodanov, Ivan The measure of the image of a differentiable mapping. (Bulgarian summary) **(80k:58015)**
Reichard, Klaus Algebraische Beschreibung der Ableitung bei 9-mal stetig-differenzierbaren Funktionen. **(80j:58004)**
Rockafellar, R. Tyrrell ★La théorie des sous-gradients et ses applications à l'optimisation. **(80g:49023)**
Tidten, Michael Fortsetzungen von C^∞-Funktionen, welche auf einer abgeschlossenen Menge in $\mathbf{R}^n$ definiert sind. (English summary) **(80k:58016)**
(Vanderstraeten-Tilquin, Godelièvе) *See* **Rockafellar, R. Tyrrell, (80g:49023)**

26B10 Implicit function theorems, Jacobians, transformations with several variables

Jittorntrum, Krisorn An implicit function theorem. **80b:26018**
Kawamura, Yoshiaki Invertibility of Lipschitz continuous mappings and its application to electrical network equations. **80k:26010**

Secondary classifications:

Komatsu, Hikosaburo The implicit function theorem for ultradifferentiable mappings. **(80e:58007)**

26B12 Calculus of vector functions

Tudosie, Constantin On some vector operators. **80h:26010**

Secondary classifications:

Corwin, Lawrence J. (*with* Szczarba, Robert H.) ★Calculus in vector spaces. **(80i:26001)**
Szczarba, Robert H. *See* **Corwin, Lawrence J., (80i:26001)**

26B15 Integration: length, area, volume [See also 28A75, 51M25.]

Currie, I. D. Regions of the n-sphere and related integrals. **80b:26019**
Dym, Harry On the absolute convergence of a multiple integral of $\sin x/x$. **80m:26012**

Secondary classifications:

Falconer, K. J. Consistency conditions for a finite set of projections of a function. **(80e:28010)**
Henstock, R. Integration, variation and differentiation in division spaces. **(80d:26011)**
Maljugin, S. A. Functions with a constant integral on congruent cubes. (Russian) **(80a:26003)**
Okitsu, Makoto Area formula. **(80a:28003)**

26B20 Integral formulas (Stokes, Gauss, Green, etc.)

Fava, N. A. On a formula related to polar coordinates in $\mathbf{R}^n$. **80h:26011**
Olkin, Ingram Matrix extensions of Liouville-Dirichlet-type integrals. **80i:26015**
Vinogradova, I. A. A generalization of the Green formula. (Russian. English summary) **80c:26010**

Secondary classifications:

Nöbeling, Georg ★Integralsätze der Analysis. **(80i:58002)**

26B25 Convexity, generalizations

Szczepaniak, Jerzy On some properties of s-convex sets and s-convex functions. **80j:26010**

Secondary classifications:

Cipra, Tomáš Class of unimodal distributions and its transformations. (Czech and Russian summaries) **(80c:60023)**
Crouzeix, Jean-Pierre Sur la différentiabilité des fonctions quasiconvexes. (English summary) **(80e:26008)**
León, Ramón V. (*with* Proschan, Frank) An inequality for convex functions involving G-majorization. **(80k:26014)**
Parry, Gareth P. On the comparison of stability criteria in anisotropic materials. **(80k:73017)**
Postolică, Vasile On set functions of bounded p-variation. **(80m:28002)**
Proschan, Frank *See* **León, Ramón V., (80k:26014)**
Zimmermann, Karel A generalization of convex functions. (Czech summary) **(80g:52002)**

26B30 Absolutely continuous functions, functions of bounded variation

Secondary classifications:

Abobadze, T. I. Functions of a bounded generalized second variation. (Russian) **(80j:42028)**

26B35 Special properties of functions of several variables, Hölder conditions, etc.

Burenkov, V. I. Partitions of unity. (Russian) **80k:26011**
de Haan, Laurens (*with* Resnick, Sidney I.) Derivatives of regularly varying functions in $\mathbf{R}^d$ and domains of attraction of stable distributions. **80g:26020**
Heiberg, Charles H. Extrema for functions of several variables. **80j:26011**
Krantz, Steven George Intrinsic Lipschitz classes on manifolds with applications to complex function theory and estimates for the $\bar\partial$ and $\bar\partial_b$ equations. **80b:26020**
Maljugin, S. A. Functions with a constant integral on congruent cubes. (Russian) **80a:26003**
Proizvolov, V. V. Letter to the editors: "Integrals that are constant on congruent domains" (Mat. Zametki **21** (1977), no. 2, 183–186). (Russian) **80c:26011**
Resnick, Sidney I. *See* **de Haan, Laurens, 80g:26020**
Strömberg, Jan-Olov Nonequivalence between two kinds of conditions on weight functions. **80j:26012**
Trohimčuk, Ju. Ju. Differential properties of real and complex functions. (Russian) **80i:26016**

Secondary classifications:

Hiriart-Urruty, Jean-Baptiste Théorèmes de valeur moyenne en analyse non différentiable: cas des fonctions localement Lipschitz à valeurs vectorielles. (English summary) **(80a:49010)**
Hwang, F. K. Majorization on a partially ordered set. **(80j:06004)**

26B40 Representation and superposition of functions

Secondary classifications:

Grande, Zbigniew La mesurabilité des fonctions de deux variables et de la superposition $F(x, f(x))$. **(80j:28013)**
Rvačov, V. L. (*with* Tonica, V. S.; Škljarov, L. Ĭ) A set of prime closing functions of three-valued logic. (Russian. English summary) **(80j:03093)**
Semenov, V. I. On the representation of the superposition of certain classes of mappings. (Russian) **(80j:57036)**
Škljarov, L. Ĭ *See* **Rvačov, V. L.; et al., (80j:03093)**
Tonica, V. S. *See* **Rvačov, V. L.; et al., (80j:03093)**
Wilczyńska, Urszula Approximate continuity of functions of two variables. **(80j:26008)**

26B99 None of the above, but in this section

Secondary classifications:

Denkowska, Z. On a continuous extension of an algebraic function. **(80i:32028)**
Kolke, Satoshi (*with* Kucharz, Wojciech) Sur les réalisations de jets non suffisants. (English summary) **(80g:58004)**
Kucharz, Wojciech *See* **Kolke, Satoshi, (80g:58004)**
Ludwig, Klaus Differenzierbare Funktionen auf kompakten metrischen Räumen. **(80b:58012)**
Marris, A. W. On steady screw motions of a viscous fluid. (Italian summary) **(80a:76017)**
Wachta, Krystyna Sur un espace complet de champs tayloriens réguliers. **(80g:58015)**

26Cxx Polynomials, rational functions

26C05 Polynomials: analytic properties, inequalities, etc.

Gantzburg, M. I. A sharp inequality for an increasing permutation of a polynomial of m variables. (Russian) **80f:26017**

Secondary classifications:

Zeitlin, David An inequality for a class of polynomials. **(80a:26004)**

26C10 Polynomials: location of zeros [See also 12D10, 30C15, 65H05.]

Guggenheimer, H. Bounds for roots of algebraic equations. **80f:26018**
Stanton, Ralph G. A note on a family of polynomials. **80h:26012**

Secondary classifications:

Erdős, Paul (*with* Hwang, Jun Shung) On a geometric property of lemniscates. **(80c:30007)**
Hwang, Jun Shung *See* **Erdős, Paul, (80c:30007)**
Pratihari, D. *See* **Samal, G., (80i:60082)**
Samal, G. (*with* Pratihari, D.) Strong result for real zeros of random polynomials. II. **(80i:60082)**

26C15 Rational functions [See also 14G30.]

26C99 None of the above, but in this section

26Dxx Inequalities {For maximal function inequalities, see 42B25; for functional inequalities, see 39C05.}

Boas, Ralph P. Inequalities for a collection. **80b:26021**

Secondary classifications:

Bullen, P. S. A chapter on inequalities. **(80g:26001)**
See also **Mitrinović, Dragoslav S.; et al., (80b:26001)**
Gel'fand, M. B. *See* **Kovalenko, V. G.; et al., (80i:26002)**
Kovalenko, V. G. (*with* Gel'fand, M. B.; Ušakov, R. P.) ★Доведення нерівностей. (Ukrainian) [Proving inequalities] **(80i:26002)**
Mitrinović, Dragoslav S. (*with* Bullen, P. S.; Vasić, P. M.) Means and inequalities connected with them. I. (Serbo-Croatian. English summary) **(80b:26001)**
Ušakov, R. P. *See* **Kovalenko, V. G.; et al., (80i:26002)**
Vasić, P. M. *See* **Mitrinović, Dragoslav S.; et al., (80b:26001)**

26D05 Inequalities for trigonometric functions and polynomials

Martić, Branislav Improvements of some analytic inequalities. (Serbo-Croatian summary) **80j:26013**
Zeitlin, David An inequality for a class of polynomials. **80a:26004**

26D10 Inequalities involving derivatives and differential and integral operators

Adams, R. A. (*with* Clarke, Frank H.) Gross's logarithmic Sobolev inequality: a simple proof. **80k:26012**
Arestov, V. V. Inequalities for fractional derivatives on the half-line. **80m:26013**
Bondge, B. K. (*with* Pachpatte, B. G.) On Wendroff type integral inequalities in n independent variables. **80j:26014**
(*with* Pachpatte, B. G.) On nonlinear integral inequalities of the Wendroff type. **80i:26019**
Clarke, Frank H. *See* **Adams, R. A., 80k:26012**
Evans, W. D. (*with* Zettl, A.) Norm inequalities involving derivatives. **80g:26021**
Everitt, W. N. An integral inequality with an application to ordinary differential operators. **80i:26020**
Goodman, T. N. T. (*with* Lee, Seng Luan) Landau and Hardy-Littlewood-Pólya inequalities involving derivatives of functions. **80j:26015**
Kuz'mina, A. L. Conditions for positiveness of integral quadratic forms. (Russian) **80c:26012**
Lee, Seng Luan *See* **Goodman, T. N. T., 80j:26015**
Lin, Chin Tsai A note on Pachpatte's inequality. **80i:26021**
Pachpatte, B. G. A note on Gronwall type integrodifferential inequalities. **80j:26016**
On some new integral and integrodifferential inequalities in two independent variables and their applications. **80f:26010**
See also **Bondge, B. K., 80i:26019** *and* **Bondge, B. K., 80j:26014**
Russell, A. M. On a fourth-order singular integral inequality. **80g:26022**
Schoenberg, I. J. The Landau problem for the differential operator $D^2 - \alpha^2$ in a circular ring. **80j:26017**
Yang, Chung Chun On some nonlinear generalizations of Gronwall-Bellman's inequality. **80c:26013**
Zettl, A. *See* **Evans, W. D., 80g:26021**

Secondary classifications:

Amos, R. J. (*with* Everitt, W. N.) On integral inequalities associated with ordinary regular differential expressions. **(80b:34017)**
Buslaev, A. P. (*with* Tihomirov, V. M.) Inequalities for derivatives in the multidimensional case. (Russian) **(80i:49009)**
Everitt, W. N. *See* **Amos, R. J., (80b:34017)**
Gutowski, Roman *See* **Martinjuk, A. A., (80k:34070)**
Martinjuk, A. A. (*with* Gutowski, Roman) ★Интегральные неравенства и устойчивость движения. (Russian) [Integral inequalities and stability of motion] **(80k:34070)**
Pachpatte, B. G. On some fundamental integro-differential inequalities and their discrete analogues. **(80k:45013)**
On some nth-order differential inequalities and their discrete analogues. **(80j:34012)**
Tihomirov, V. M. *See* **Buslaev, A. P., (80i:49009)**

26D15 Inequalities for sums, series and integrals

Aparcin, A. S. (*with* Ten Men Jan) Unimprovable estimates of the solutions of certain integral inequalities. (Russian) **80b:26022**
Bainov, D. D. *See* **Hristova, S. G., 80b:26024; Hristova, S. G., 80c:26014** *and* **Hristova, S. G., 80m:26014**
Bradley, J. Scott Hardy inequalities with mixed norms. **80a:26005**
Brunk, H. D. (*with* Martin, N. F. G.) An inequality involving powers of sums of powers. **80b:26023**
Chan, Ling Yau Some extensions of Hardy's inequality. **80h:26013**
Chong, Kong Ming A note on Tchebychef's inequality. **80f:26011**
An inductive rearrangement theorem. **80d:26016**
A rearrangement inequality. **80j:26018**
Copson, E. T. Two series inequalities. **80f:26012**
Hristova, S. G. (*with* Baĭnov, D. D.) A generalization of Bihari's inequality. (Russian. Bulgarian and English summaries) **80m:26014**
(*with* Baĭnov, D. D.) Some integral inequalities. (Russian) **80c:26014**
(*with* Baĭnov, D. D.) A generalization of an inequality of Bihari. (Russian) **80b:26024**
Jones, B. Frank, Jr. A note on Hölder's inequality. **80k:26013**
Kwong, Man Kam (*with* Zettl, A.) An extension of the Hardy-Littlewood inequality. **80h:26014**
León, Ramón V. (*with* Proschan, Frank) An inequality for convex functions involving G-majorization. **80k:26014**
Love, E. R. Generalizations of a classical inequality. **80h:26015**
Martić, Branislav Note sur certaines inégalités d'intégrales. (Serbo-Croatian summary) **80c:26015**
Martin, N. F. G. *See* **Brunk, H. D., 80b:26023**
Pachpatte, B. G. On some fundamental integral inequalities with applications. **80j:26019**
See also **Singare, S. M., 80b:26025**
Proschan, Frank *See* **León, Ramón V., 80k:26014**
Rahmail, R. T. Sharpening and inversion of some inequalities for convex and concave sequences. (Russian) **80f:26013**
Singare, S. M. (*with* Pachpatte, B. G.) On some discrete generalizations of an inequality of Gronwall. **80b:26025**
Ten Men Jan *See* **Aparcin, A. S., 80b:26022**
Wang, Chung Lie Applications of variants of the Hölder inequality and its inverses: extensions of Barnes, Marshall-Olkin, and Nehari inequalities. **80b:26026**
Functional equation approach to inequalities. **80i:26022**
On development of inverses of the Cauchy and Hölder inequalities. **80g:26023**
Zettl, A. *See* **Kwong, Man Kam, 80h:26014**

Secondary classifications:

Butzer, P. L. (*with* Fehér, Franziska) Generalized Hardy and Hardy-Littlewood inequalities in rearrangement-invariant spaces. **(80c:46037)**
Das, K. M. A note on an inequality due to Greene. **(80j:34010)**
Ding, Xia Xi On some imbedding theorems. **(80f:46031)**
Fehér, Franziska *See* **Butzer, P. L., (80c:46037)**
Jurkat, W. B. (*with* Troutman, J. L.) Maximal inequalities related to generalized a.e. continuity. **(80h:46038)**
Martić, Branislav Improvements of some analytic inequalities. (Serbo-Croatian summary) **(80j:26013)**
Micchelli, Charles A. On an extremal problem of Subbotin concerning finite differences and derivatives. **(80k:41014)**
Pachpatte, B. G. A note on some new nth order discrete inequalities. **(80h:39004)**
Pelczar, Andrzej Sufficiency of jets by the method of integral inequalities. **(80g:58005)**
Roy, S. M. (*with* Singh, Virendra) Completeness of tests of local hidden variable theories. **(80f:81014)**
Searcy, J. L. (*with* Troesch, B. A.) A cyclic inequality and a related eigenvalue problem. **(80f:15019)**
Singh, Virendra *See* **Roy, S. M., (80f:81014)**
Troesch, B. A. *See* **Searcy, J. L., (80f:15019)**
Troutman, J. L. *See* **Jurkat, W. B., (80h:46038)**

26D20 Other analytical inequalities

Brenner, J. L. A unified treatment and extension of some means of classical analysis. I. Comparison theorems. **80d:26017**
El-Neweihi, Emad (*with* Proschan, Frank) Unified treatment of inequalities of the Weierstrass product type. **80b:26027**
Proschan, Frank *See* **El-Neweihi, Emad, 80b:26027**

Secondary classifications:

Imoru, Christopher Olufunde A note on an inequality for the gamma function. **(80a:33001)**
Martić, Branislav Improvements of some analytic inequalities. (Serbo-Croatian summary) **(80j:26013)**

26D99 None of the above, but in this section

26Exx Miscellaneous topics [See also 58Cxx.]

26E05 Real-analytic functions

Boghossian, Artin Harmonic extension of real analytic functions. **80k:26015**

Secondary classifications:

Shaw, J. K. (*with* Winfrey, W. R.) Positivity properties of linear differential operators. **(80k:34008)**
Winfrey, W. R. *See* **Shaw, J. K., (80b:34008)**

26E10 C^∞-functions, quasi-analytic functions

Arrate Peña, M. (*with* Saiz Zaldo, F.) A characterization of the quasi-analytic classes. (Spanish) **80f:26014**
Čerusjavskiĭ, A. G. Criteria of quasianalyticity for partial differential operators with variable coefficients. (Russian) **80m:26015**
Neuman, František (*with* Vosmanský, Jaromir) Functions (sequences) whose derivatives (differentiations) are of constant signs. (Russian. Azerbaijani and English summaries) **80u:26006**
Saiz Zaldo, F. *See* **Arrate Peña, M., 80f:26014**
Vosmanský, Jaromir *See* **Neuman, František, 80a:26006**
Wallin, Hans The trace to closed sets of the Zygmund class of quasismooth functions in R^n. **80i:26023**

Secondary classifications:

Damon, James Topological stability in the nice dimensions. **(80h:58015)**
Gaffney, Terence A note on the order of determination of a finitely determined germ. **(80j:58010)**
Golubitsky, Martin (*with* Schaeffer, David G.) Imperfect bifurcation in the presence of symmetry. **(80j:58017)**
Hain, Richard M. A characterization of smooth functions defined on a Banach space. **(80h:58014)**
Schaeffer, David G. *See* **Golubitsky, Martin, (80j:58017)**
Seip, Ulrich A convenient setting for differential calculus. **(80b:58013)**

26E15 Calculus of functions on infinite-dimensional spaces

Abunbara, Teófilo A remark on infinitely nuclearly differentiable functions. **80m:26016**

Secondary classifications:

Bhatia, Rajendra (*with* Parthasarathy, Kalyanapuram Rangachari) ★Lectures on functional analysis. Part I. **(80d:47001)**
Parthasarathy, Kalyanapuram Rangachari *See* **Bhatia, Rajendra, (80d:47001)**
Seppälä, Veikko On infinitesimal calculus within a class of topological near-algebras. (French summary) **(80d:58008)**

26E20 Calculus of functions taking values in infinite-dimensional spaces

Duval, Jean-Pierre Une caractérisation des fonctions périodiques. (English summary) **80j:26020**
Giacalone, Angela (*with* Gori Cocchieri, Candida) The differentiability of mappings with values in Banach spaces. (Italian) **80a:26007**
Gori Cocchieri, Candida *See* **Giacalone, Angela, 80a:26007**

Secondary classifications:

Arrate Peña, M. (*with* Saiz Zaldo, F.) A characterization of the quasi-analytic classes. (Spanish) **(80f:26014)**
Saiz Zaldo, F. *See* **Arrate Peña, M., (80f:26014)**

26E25 Set-valued functions [See also 54C60.]

26E30 Non-Archimedean analysis [See also 12J25.]

Li, Bang He Differential and integral calculus on a non-Archimedean field. (Chinese. English summary) **80c:26016**

Secondary classifications:

Tsurumi, K. On spaces of Baire functions over nonarchimedean valued fields. **(80c:54012)**

26E35 Nonstandard analysis [See also 03H05.]

Laugwitz, Detlef ★Infinitesimalkalkül: Kontinuum und Zahlen. **80d:26018**

Secondary classifications:

Albeverio, Sergio (*with* Fenstad, Jens Erik; Høegh-Krohn, Raphael) Singular perturbations and nonstandard analysis. **(80k:34029)**
Callot, Jean-Louis (*with* Diener, Francine; Diener, Marc) Le problème de la "chasse au canard". (English summary) **(80b:58050)**
(Cauchy, Augustin Louis) *See* **Fisher, Gordon M., (80b:01016)**
Diener, Francine *See* **Callot, Jean-Louis; et al., (80b:58050)**
Diener, Marc *See* **Callot, Jean-Louis; et al., (80b:58050)**
Fenstad, Jens Erik *See* **Albeverio, Sergio; et al., (80k:34029)**
Fisher, Gordon M. Cauchy and the infinitely small. (French summary) **(80b:01016)**
Helms, L. L. (*with* Loeb, Peter A.) Applications of nonstandard analysis to spin models. **(80d:82038)**
Høegh-Krohn, Raphael *See* **Albeverio, Sergio; et al., (80k:34029)**
Loeb, Peter A. *See* **Helms, L. L., (80d:82038)**
Wattenberg, Frank Nonstandard measure theory: avoiding pathological sets. **(80b:03095)**

26E99 None of the above, but in this section

Carrese, Rosalba An application of Whitney's extension theorem to the study of the derivative of an interval function. (Italian) **80b:26016**

Secondary classifications:

Demuth, Osvald Constructive analogues of generalized absolutely continuous functions of generalized bounded variation. (Russian) **(80b:03100)**

28–XX MEASURE AND INTEGRATION (For analysis on manifolds, see 58–XX.)

28–01 Elementary exposition, textbooks

Cecoho, V. A. ★Теория меры и интеграл Лебега. (Russian) [The theory of measure and the Lebesgue integral] **80d:28001**
López Fernández-Asenjo, Félix *See* **Pérez Gómez, A., 80g:28001**
Myers, David L. *See* **Wilcox, Howard, 80c:28001**
Pérez Gómez, A. (*with* López Fernández-Asenjo, Félix) An application of the semi-open topology on R. (Spanish) **80g:28001**
Wilcox, Howard (*with* Myers, David L.) ★An introduction to Lebesgue integration and Fourier series. **80c:28001**

Secondary classifications:

Bauer, Heinz ★Wahrscheinlichkeitstheorie und Grundzüge der Masstheorie. **(80b:60001)**
Billingsley, Patrick ★Probability and measure. **(80b:60001)**
Ghosh, S. On a set-theoretic method. **(80g:04002)**
Rešetnjak, Ju. G. ★Введение в теорию интеграла Лебега. (Russian) [Introduction to the theory of the Lebesgue integral] **(80j:26001)**

28–02 Advanced exposition (research surveys, monographs, etc.)

Harazišvili, A. B. ★Некоторые вопросы теории множеств и теории меры. (Russian) [Questions in the theory of sets and in measure theory] **80k:28001**
Jacobs, Konrad ★Measure and integral. **80k:28002**
(Kurzweil, Jaroslav) *See* **Jacobs, Konrad, 80k:28002**

Secondary classifications:

Dellacherie, Claude (*with* Meyer, Paul-André) ★Probabilities and potential. **(80b:60004)**
Meyer, Paul-André *See* **Dellacherie, Claude, (80b:60004)**

28–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Aleksandrov, P. S. ★Теория функций действительного переменного и теория топологических пространств. (Russian) [The theory of functions of a real variable and the theory of topological spaces] **(80f:01024)**
(Kolmogorov, A. N.) *See* **Aleksandrov, P. S., (80f:01024)**

28–04 Explicit machine computation and programs (not the theory of computation or programming)

28–06 Proceedings, conferences, etc.

(Denker, Manfred) *See* **Ergodic theory, 80g:28002**
(Flachsmeyer, Jürgen) *See* **Proceedings: Conference Topology and Measure, 80d:28002a** *and* **Proceedings: Conference Topology and Measure, 80d:28002b**
(Frolík, Zdeněk) *See* **Proceedings: Conference Topology and Measure, 80d:28002a** *and* **Proceedings: Conference Topology and Measure, 80d:28002b**
(Jacobs, Konrad) *See* **Ergodic theory, 80g:28002**
(Rota, Gian-Carlo) *See* **Studies in probability and ergodic theory, 80b:28001**
(Terpe, F.) *See* **Proceedings: Conference Topology and Measure, 80d:28002a** *and* **Proceedings: Conference Topology and Measure, 80d:28002b**
Conference:
Ergodic Theory *See* **Ergodic theory, 80g:28002**
Topology and Measure *See* **Proceedings: Conference Topology and Measure, 80d:28002a** *and* **Proceedings: Conference Topology and Measure, 80d:28002b**
Ergodic theory ★Ergodic theory. **80g:28002**
See also **Studies in probability and ergodic theory, 80b:28001**
Measure *See* **Proceedings: Conference Topology and Measure, 80d:28002a** *and* **Proceedings: Conference Topology and Measure, 80d:28002b**
Oberwolfach *See* **Ergodic theory, 80g:28002**
Probability *See* **Studies in probability and ergodic theory, 80b:28001**
Proceedings:
Conference Topology and Measure ★Proceedings of the Conference Topology and Measure. I. Part 1. **80d:28002a**
★Proceedings of the Conference Topology and Measure. I. Part 2. **80d:28002b**

Studies in probability and ergodic theory ★Studies in probability and ergodic theory. **80b:28001**
Topology *See* **Proceedings: Conference Topology and Measure, 80d:28002a** *and* **Proceedings: Conference Topology and Measure, 80d:28002b**
Zimowitz *See* **Proceedings: Conference Topology and Measure, 80d:28002a** *and* **Proceedings: Conference Topology and Measure, 80d:28002b**

Secondary classifications:

(Beck, Anatole) *See* **Probability in Banach spaces, (80d:60004)**
(Rosenblatt, Murray) *See* **Studies in probability theory, (80b:60007)**
(Weron, Aleksander) *See* **Probability theory on vector spaces, (80c:60008)**
Banach spaces *See* **Probability in Banach spaces, (80d:60004)**
Conference:
Probability in Banach Spaces *See* **Probability in Banach spaces, (80d:60004)**
Probability Theory on Vector Spaces *See* **Probability theory on vector spaces, (80c:60008)**
Oberwolfach *See* **Probability in Banach spaces, (80d:60004)**
Probability on Banach spaces ★Probability in Banach spaces. II. **(80d:60004)**
Probability theory *See* **Studies in probability theory, (80b:60007)**
Probability theory on vector spaces ★Probability theory on vector spaces. **(80c:60008)**
Studies in probability theory ★Studies in probability theory. **(80b:60007)**
Trzebieszowice *See* **Probability theory on vector spaces, (80c:60008)**
Vector spaces *See* **Probability theory on vector spaces, (80c:60008)**

28Axx Classical measure theory

28A05 Classes of sets (Borel fields, σ-rings, etc.), measurable sets, Suslin sets, analytic sets [See also 04A15, 26A21, 54H05.]

Bierlein, Dieter Measure extensions according to a given function. **80a:28001**
Bindschadler, David (*with* Nishiura, Togo) An integral inequality. **80f:28001**
Davies, Roy O. The plane is the union of three rectilinearly accessible sets. **80c:28002**
Dellacherie, Claude Théorie unifiée des capacités et des ensembles analytiques. **80c:28001**
(*with* Mokobodzki, Gabriel) Deux propriétés des ensembles minces (abstraits). **80j:28001**
Grzegorek, E. Remarks on σ-fields without continuous measures. **80b:28002**
Harazišvili, A. B. Sets with a uniqueness property with respect to Lebesgue measure. (Russian) **80i:28002**
On the number of metric transitive measures on a given σ-algebra. (Russian. English and Georgian summaries) **80m:28001**
Hillard, Gérard Une généralisation du théorème de Saint-Raymond sur les boréliens à coupes $\mathcal{K}_\sigma$. (English summary) **80d:28003**
Ho, S. M. F. (*with* Naimpally, S. A.) An abstract model for measure and category. **80i:28003**
Maharam, Dorothy An example on tail fields. **80d:28004**
Miller, Harry I. A universal null set whose Steinhaus distance set is $[0, \infty)$. (Serbo-Croatian summary) **80e:28002**
On transformations of Baire sets in E^n. (Serbo-Croatian summary) **80e:28003**
Mokobodzki, Gabriel *See* **Dellacherie, Claude, 80j:28001**
Naimpally, S. A. *See* **Ho, S. M. F., 80i:28003**
Nishiura, Togo *See* **Bindschadler, David, 80f:28001**
Ramachandran, D. Existence of independent complements in regular conditional probability spaces. **80d:28005**
Rao, B. V. *See* **Rao, K. P. S. Bhaskara, 80d:28006** *and* **Rao, K. P. S. Bhaskara, 80d:28007**
Rao, K. P. S. Bhaskara (*with* Rao, B. V.) Atomless structures and σ-independence. (Russian summary) **80d:28006**
(*with* Rao, B. V.) Lattice of Borel structures. (Russian summary) **80d:28007**
Shreve, Steven E. Probability measures and the C-sets of Selivanovskij. **80d:28008**
Talagrand, Michel Ensembles $\mathcal{K}$-analytiques et fonctions croissantes de compacts. **80d:28009**
Les boules peuvent-elles engendrer la tribu borélienne d'un espace métrisable non séparable? **80d:28010**
Viertl, Reinhard Eine Charakterisierung von σ-Algebren von Teilmengen einer Menge und elementare Trennungseigenschaften von Messräumen. **80g:28003**
Volčič, Alessio On the set of definition of measures. (Italian. English summary) **80e:28004**

Secondary classifications:

Alias, Alexander On Borel, Baire and Lebesgue sets. **(80h:04004)**
Borwein, D. (*with* Ditor, S. Z.) Translates of sequences in sets of positive measure. **(80i:28018)**
Bourgain, Jean A stabilization property and its applications in the theory of sections. **(80e:04001)**
Briggs, James M. (*with* Schaffter, Thomas) Measure and cardinality. **(80j:03075)**
Ditor, S. Z. *See* **Borwein, D., (80i:28018)**
Migeri, G. A unified approach to measurable and continuous selections. **(80d:28023)**
Mauldin, R. Daniel Borel parametrizations. **(80j:54033)**
Novikov, P. S. ★Избранные труды. (Russian) [Selected works] **(80i:01017)**
Schaffter, Thomas *See* **Briggs, James M., (80j:03075)**

28A10 Real- or complex-valued set functions

Bell, Wayne C. Two theorems on absolutely continuous set functions. **80k:28003**
Fremlin, David H. (*with* Talagrand, Michel) A decomposition theorem for additive set-functions, with applications to Pettis integrals and ergodic means. **80k:28004**
Geman, Donald Dispersion points for linear sets and approximate moduli for some stochastic processes. **80i:28004**
Maitra, A. (*with* Rao, B. V.; Rao, K. P. S. Bhaskara) A problem in the extension of measures. **80d:28011**
Mokobodzki, Gabriel Domination d'une mesure par une capacité (un analogue du théorème de Lebesgue-Nikodým). **80j:28002**
Postolică, Vasile On set functions of bounded p-variation. **80m:28002**
Rao, B. V. *See* **Maitra, A.; et al., 80d:28011**
Rao, K. P. S. Bhaskara *See* **Maitra, A.; et al., 80d:28011**
Talagrand, Michel *See* **Fremlin, David H., 80k:28004**

Secondary classifications:

Giannone, Alberto An introduction to nonstandard methods via simply additive measures. (Italian) **(80d:03064)**
Hafizov, M. H. Uniform boundedness of a family of set functions. (Russian) **(80g:28010)**
Lane, David A. (*with* Sudderth, William D.) Diffuse models for sampling and predictive inference. **(80a:60006)**
Sudderth, William D. *See* **Lane, David A., (80a:60006)**
Viana, Victor The structure of formal languages from the standpoint of measure theory. (Romanian. English summary) **(80a:68094)**

28A12 Contents, measures, outer measures, capacities

Bandt, Christoph On the permeability of submeasures on finite algebras. **80j:28003**
Baron, Karol Note on measures. (Russian summary) **80d:28012**
Barone, E. Noncontinuous simply additive measures. (Italian. English summary) **80i:28005**
Bell, Wayne C. Unbounded uniformly absolutely continuous sets of measures. **80k:28005**
Cohen, Leon W. Topology and measure. **80e:28005**
Dal Maso, Gianni Some theorems on the Γ-limits of measures. (Italian. English summary) **80c:28003**
Dellacherie, Claude Appendice à l'exposé de Mokobodzki: "Ensembles à coupes dénombrables et capacités dominées par une mesure" [Séminaire de Probabilités (Univ. Strasbourg, Strasbourg, 1976/1977), pp. 491–508, Lecture Notes in Math., 649, Springer, Berlin, 1978]. **80i:28007b**
Dinges, Hermann Zur Algebra der Masstheorie. **80f:28001**
Erišov, M. P. On the problem of extension of measures. (Russian) **80k:28006**
Fremlin, David H. Decomposable measure spaces. **80b:28003**
Hafizov, M. H. Systems of sets with set functions. (Russian) **80m:28003**
Harazišvili, A. B. Points of relative density. (Russian. Georgian and English summaries) **80d:28013**
Horná, Štefánia On compact measures on semirings. (Slovak and Russian summaries) **80h:28002**
Jakab, Zs. (*with* Laczkovich, M.) A characterization of Jordan and Lebesgue measures. **80d:28014**
Jech, Thomas (*with* Prikry, Karel) On projections of finitely additive measures. **80f:28002**
Johnson, Roy A. Some relationships between measures. **80j:28004**
Jůza, Miloslav Deux mesures spéciales dans l'espace E_2. (Russian summary) **80b:28004**
Klimkin, V. M. Absolute equicontinuity. (Russian) **80e:28006**
Laczkovich, M. *See* **Jakab, Zs., 80d:28014**
Mattila, Pertti Densities of measures on the real line. **80i:28006**
Miller, Harry I. Relationships between various gauges of the size of sets of real numbers. II. (Serbo-Croatian summary) **80j:28005**
Mokobodzki, Gabriel Ensembles à coupes dénombrables et capacités dominées par une mesure. **80i:28007a**
See also **Dellacherie, Claude, 80i:28007b**
Pal, M. Extension of measures. (Slovak and Russian summaries) **80h:28003**
On sets of positive measure. (Serbo-Croatian summary) **80g:28004**
Prikry, Karel *See* **Jech, Thomas, 80f:28002**
Ramachandran, D. Perfect mixtures of perfect measures. **80d:28015**
Sabik, Maciej On proper linearly invariant ideals of sets. (Serbo-Croatian summary) **80j:28006**
Scaravelli, Corrado (*with* Teppati, Giancarlo) On probability Souslin measures. (Italian summary) **80e:28007**
Scozzafava, Romano On finitely additive probability measures. **80j:28007**
Shiflett, Ray C. Extreme stochastic measures and Feldman's conjecture. **80h:28001**
Talagrand, Michel Algèbres d'ensembles sur lesquelles toutes les mesures σ-additives sont bornées. **80d:28016**
Teppati, Giancarlo *See* **Scaravelli, Corrado, 80e:28007**
Wieczorek, Andrzej Ordering probabilities on an ordered measurable space. **80a:28002**
Yasumoto, Masahiro Finitely additive measures on N. **80f:28003**

Secondary classifications:

Antoni, Jozef On characterization of summability fields by integral. (Russian summary) **(80h:40003)**
Brehmer, Siegfried Algebraic characterisation of measure and integral by the method of Carathéodory. **(80j:28018)**
Chersi, Franco Finitely additive invariant measures. (Italian summary) **(80k:28020)**
Harazišvili, A. B. ★Некоторые вопросы теории множеств и теории меры. (Russian) [Questions in the theory of sets and in measure theory] **(80k:28001)**
Khurana, Surjit Singh Submeasures and decomposition of measures. **(80i:28023)**
Šapiro, L. B. On the space of probability measures. (Russian) **(80i:54017)**
Sherman, Jon A new characterization of amenable groups. **(80k:43001)**
Wattenberg, Frank Nonstandard measure theory: avoiding pathological sets. **(80h:03095)**

28A15 Abstract differentiation theory, differentiation of set functions [See also 26A24.]

Albano, L. (*with* Fedele, N.) An abstract formulation of a theorem of Lusin. (Italian) **80i:28008**
Fedele, N. *See* **Albano, L., 80i:28008**
de Guzmán, Miguel ★Дифференцирование интегралов в R^n. (Russian) [Differentiation of integrals in R^n] **80b:28005**
Maynard, Hugh B. A Radon-Nikodým theorem for finitely additive bounded measures. **80k:28007**
Schmidt, Klaus Sur la convergence d'une amartingale bornée et un théorème de Chatterji. (English summary) **80i:28009**
(Skvorcov, V. A.) *See* **de Guzmán, Miguel, 80b:28005**
Thomson, B. S. On weak Vitali covering properties. **80m:28004**
Zajíček, Luděk An elementary proof of the one-dimensional density theorem. **80c:28004**
Zerekidze, T. Š. Strong differentiability of indefinite integrals in R^n. (Russian. Georgian and English summaries) **80m:28005**

Secondary classifications:

El Hélou, Youssef ★Recouvrement du tore T^ν par des ouverts aléatoires et dimension de Hausdorff de l'ensemble non recouvert. **(80i:60013)**
Kuo, Hui Hsiung The chain rule for differentiable measures. **(80d:46089)**
Millet, Annie Sur la caractérisation des conditions de Vitali par la convergence essentielle des martingales. (English summary) **(80i:60070)**
Pfanzagl, J. Conditional distributions as derivatives. **(80k:60007)**
Stein, Elias M. (*with* Wainger, Stephen) Problems in harmonic analysis related to curvature. **(80k:42023)**
Wainger, Stephen *See* **Stein, Elias M., (80k:42023)**

28A20 Measurable and nonmeasurable functions, sequences of measurable functions, modes of convergence

Cenzer, Douglas (*with* Mauldin, R. Daniel) Measurable parametrizations and selections. **80i:28010**
Eisen, Goswin A selection lemma for sequences of measurable sets, and lower semicontinuity of multiple integrals. **80h:28004**
Gogoladze, D. F. The theorems of Lebesgue, Riesz and Egorov for generalized sequences. (Russian) **80j:28008**
Grande, Zbigniew (*with* Lipiński, Jan Stanisław) Un exemple d'une fonction sup-mesurable qui n'est pas mesurable. **80b:28006**
Deux exemples de fonctions non mesurables. **80k:28008**
Quelques remarques sur un théorème de Kamke et les fonctions sup-mesurables. **80j:28009**
Un exemple de fonction non mesurable. **80i:28011**
Himmelberg, C. J. (*with* Van Vleck, F. S.) Corrigendum and addendum to: "Multifunction on abstract measurable spaces and application to stochastic decision theory" [Ann. Mat. Pura Appl. (4) **101** (1974), 229–236; MR **54** #13016]. **80i:28012**
Idzik, Adam Equivalent definitions for the measurability of a multivariate function and Filippov's lemma. (Polish) **80j:28010**
Janssen, Arnold Some remarks on the decomposition of kernels. **80d:28017**
Lipiński, Jan Stanisław *See* **Grande, Zbigniew, 80b:28006**
Mauldin, R. Daniel *See* **Cenzer, Douglas, 80i:28010**
Meyer, Paul-André *See* **Yor, Marc, 80j:28011**
(Mokobodzki, Gabriel) *See* **Yor, Marc; et al., 80j:28011**
Mubaiov, M. A. Fullness of measure of a set of Lebesgue points. (Russian. Tajiki summary) **80i:28013**
Neubrunn, Tibor Almost uniform convergence for continuous parameters. (Russian summary) **80g:28005**
Preda, Vasile On the intrinsic convergence. **80i:28014**
Šragin, I. V. Carathéodory conditions. (Russian) **80k:28009**
Van Vleck, F. S. *See* **Himmelberg, C. J., 80i:28012**
Yor, Marc (*with* Meyer, Paul-André) Sur l'extension d'un théorème de Doob à un noyau σ-fini d'après G. Mokobodzki. **80j:28011**

Secondary classifications:

Arrate Peña, M. (*with* Saiz Zaldo, F.) A characterization of the quasi-analytic classes. (Spanish) **(80f:26014)**
Bridges, Douglas S. On the constructive convergence of series of independent functions. **(80g:03060)**
Cignoli, R. (*with* Hounie, Jorge G.) Functions with arbitrarily small periods. **(80i:26004)**
van Douwen, Eric K. (*with* Lutzer, David J.) On the classification of stationary sets. **(80h:54038)**
Hounie, Jorge G. *See* **Cignoli, R., (80i:26004)**
Khurana, Surjit Singh Pointwise compactness and measurability. **(80m:46044)**
Lutzer, David J. *See* **van Douwen, Eric K., (80h:54038)**
Rice, Michael D. Uniformities in the descriptive theory of sets. II. Measurable functions. **(80g:54043)**
Saiz Zaldo, F. *See* **Arrate Peña, M., (80f:26014)**
Shreve, Steven E. Probability measures and the C-sets of Selivanovskij. **(80d:28008)**

28A25 Integration with respect to measures and other set functions

Antonini, Rita Giuliano (*with* Zanzotto, Pio Andrea) Sur la représentation intégrale de certaines fonctionnelles monotones. (Italian summary) **80i:28015**
Greco, Gabriele H. Monotone integrals. (Italian) **80d:28018**
an der Heiden, Uwe On the representation of linear functionals by finitely additive set functions. **80f:28004**
Thomsen, Wolfgang The common domain of uniqueness of the products of finitely additive probability measures. **80m:28006**
Zanzotto, Pio Andrea *See* **Antonini, Rita Giuliano, 80i:28015**

Secondary classifications:

Antoni, Józef On characterization of summability fields by integral. (Russian summary) **(80h:40003)**
Appling, William D. L. Integrability and closest approximation representations. **(80i:41028)**
Bardaro, Carlo (*with* Candeloro, Domenico) The approximation of the Burkill-Cesari integral for sublinear functionals on measures, and applications to the multiple integral of the calculus of variations. (Italian) **(80e:49029)**
Candeloro, Domenico *See* **Bardaro, Carlo, (80e:49029)**
Hoover, Douglas N. Probability logic. **(80b:03044)**
Maynard, Hugh B. A Radon-Nikodým theorem for finitely additive bounded measures. **(80k:28007)**

28A33 Spaces of measures, convergence of measures [See also 46E27, 60Bxx.]

Jiménez Guerra, Pedro Compactness in the space of Radon measures of type (3). **80i:28016**
Pachl, Jan K. Measures as functionals on uniformly continuous functions. **80j:28012**
Zafarani, Jafar The strict topology and topological measure theory for completely regular spaces. **80d:28019**

Secondary classifications:

Adamski, Wolfgang An abstract approach to weak topologies in spaces of measures. **(80c:46036)**
Jeschek, Franz *See* **Poppe, Harry, (80i:46025)**
Lotz, Siegfried A note on Borel measures with support and τ-smooth Borel measures. **(80h:28018)**
Poppe, Harry (*with* Jeschek, Franz) Remarks on compactness in spaces of measures. **(80i:46025)**

28A35 Measures and integrals in product spaces

Christensen, Jens Peter Reus Some results with relation to the control measure problem. **80e:28008**
Grande, Zbigniew La mesurabilité des fonctions de deux variables et de la superposition $F(x, f(x))$. **80j:28013**
Hansel, G. (*with* Troallic, Jean-Pierre) Mesures marginales et théorème de Ford-Fulkerson. **80f:28005**
Miamee, A. G. (*with* Salehi, H.) A note on the product of operator-valued measures. **80h:28005**
Oxtoby, John C. (*with* Prasad, Vidhu S.) Homeomorphic measures in the Hilbert cube. **80h:28006**
Pawelska, Joanna On some example of a nonmeasurable set. **80i:28017**
Prasad, Vidhu S. *See* **Oxtoby, John C., 80h:28006**
Salehi, H. *See* **Miamee, A. G., 80h:28005**
Sylvester, Garret S. Weakly coupled Gibbs measures. **80m:28007**
Thomsen, Wolfgang On a Fubini-type theorem and its application in game theory. (German and French summaries) **80c:28005**
Troallic, Jean-Pierre *See* **Hansel, G., 80f:28005**

Secondary classifications:

Ciafaloni, M. (*with* Onofri, E.) Path integral formulation of reggeon quantum mechanics. **(80b:81109)**
Hoover, Douglas N. Probability logic. **(80b:03044)**
Lichtenberg, Allan J. Adiabatic and stochastic motion of charged particles in the field of a single wave. **(80k:82050)**
Mokobodzki, Gabriel Ensembles à coupes dénombrables et capacités dominées par une mesure. **(80i:28007a)**
Naka, Sigefumi Canonical approach to spinning particles. **(80h:81024)**
Ohba, Sachio Product of measures. II. (Japanese summary) **(80i:28025)**
Onofri, E. *See* **Ciafaloni, M., (80b:81109)**
Sudakov, V. N. Geometric problems in the theory of infinite-dimensional probability distributions. **(80e:60052)**
Thomsen, Wolfgang The common domain of uniqueness of the products of finitely additive probability measures. **(80m:28006)**
Trudy Mat. Inst. Steklov. *See* **Sudakov, V. N., (80e:60052)**

28A50 Integration and disintegration of measures

Goldman, André Relations entre les propriétés de mesurabilité universelle pour un espace topologique T et la propriété de Radon-Nikodým pour le cône positif des mesures de Radon (resp. de Baire) sur T. **80g:28006**
Maserick, Peter H. Désintégration à densité L_p et mesures singulières. (English summary) **80g:28007**
Pachl, Jan K. Disintegration and compact measures. **80d:28020**

28A51 Lifting theory [See also 46G15.]

Johnson, Russell A. Existence of a strong lifting commuting with a compact group of transformations. II. **80m:28008**
Losert, Viktor A measure space without the strong lifting property. **80f:28006**
Maher, Richard J. Strong liftings on topological measured spaces. **80c:28006**

Secondary classifications:

Bellow, Alexandra Mesures de Radon et espaces relèvement compacts. (English summary) **(80j:28019)**
Talagrand, Michel Solution d'une question de H. Weizsächer. **(80d:46081)**

28A60 Measures on Boolean rings, measure algebras [See also 54H10.]

Bachman, George (*with* Sultan, Alan) Measure theoretic techniques in topology and mappings of replete and measure replete spaces. **80c:28007**
Čilin, V. I. *See* **Sarymsakov, T. A., 80k:28010**
Khurana, Surjit Singh Some remarks on the sequences of exhaustive measures and uniform boundedness of measures. **80e:28009**
Kranz, Przemysław Submeasures on Boolean algebras and applications to control measure problem. **80m:28009**
Lawrence, John (*with* Zorzitto, Franco) Groups acting ergodically on measure algebras. (Italian summary) **80h:28007**
Sarymsakov, T. A. (*with* Čilin, V. I.) Measures on topological Boolean algebras. **80k:28010**
Sultan, Alan *See* **Bachman, George, 80c:28007**
Zorzitto, Franco *See* **Lawrence, John, 80h:28007**

Secondary classifications:

Ivan, Floarea Spaces of separators. (Romanian. French summary) **(80c:60009)**
Boolean algebras with probability. I. (Romanian. French summary) **(80i:60001)**
Khurana, Surjit Singh Submeasures and decomposition of measures. **(80i:28023)**
Vladimirov, D. A. The independence of subalgebras and partitions. (Russian. English summary) **(80j:60004)**

28A75 Length, area, volume, other geometric measure theory [See also 26B15, 49F20.]

Borgato, Maria Teresa $\mathcal{H}^n_{n-1}$ measures and sets with finite perimeter. (Italian. English summary) **80h:28008**
Borwein, D. (*with* Ditor, S. Z.) Translates of sequences in sets of positive measure. **80i:28018**
Bruneau, Michel Calcul des aires. (English summary) **80b:28007**
Ditor, S. Z. *See* **Borwein, D., 80i:28018**
Falconer, K. J. Consistency conditions for a finite set of projections of a function. **80c:28010**
Jacquot, Bernard Groupes engendrés par des ensembles compacts Lebesgue-négligeables. **80g:28008**
Jůra, Miloslav Définition axiomatique de la mesure de Hausdorff. (Czech summary) **80c:28008**
Marion, Jacques Le calcul de la mesure de Hausdorff des sous-ensembles parfaits isotypiques de $\mathbf{R}^m$. (English summary) **80g:28009**
Ohtsuka, Makoto Area formula. **80a:28003**
Saha, N. G. On sets under certain linear transformation. **80m:28010**

Secondary classifications:

Berger, Johann Rektifizierbare vierdimensionale Simplices. **(80a:52007)**
Boni, Mauro (*with* Salvadori, Anna) Convergence in length and variation in the generalized sense with a weight. (Italian) **(80a:49014)**
Goffman, Casper Bounded variation and absolute continuity in the theory of surface area. **(80a:49071)**
de Guzmán, Miguel Besicovitch theory of linearly measurable sets and Fourier analysis. **(80j:42023)**
Parisi, G. Hausdorff dimensions and gauge theories. **(80c:81084)**
Perevalov, G. E. The compactness of the set of plane continua of finite linear measure. (Russian) **(80f:54025)**
Salvadori, Anna *See* **Boni, Mauro, (80a:49014)**
Schneider, Rolf Curvature measures of convex bodies. **(80d:52012)**
Teissier, Bernard Du théorème de l'index de Hodge aux inégalités isopérimétriques. (English summary) **(80k:14014)**
Wattenberg, Frank Nonstandard measure theory: avoiding pathological sets. **(80h:03095)**

28A99 None of the above, but in this section

Henson, C. Ward Analytic sets, Baire sets and the standard part map. **80i:28019**
Loeb, Peter A. Weak limits of measures and the standard part map. **80i:28020**

Secondary classifications:

Khalili, Siamak Fuzzy measures and mappings. **(80c:03057)**
Shiflett, Ray C. Continuous stochastic measures and Markov operators. **(80m:60007)**
Zahn, Peter ★Ein konstruktiver Weg zur Masstheorie und Funktionalanalysis. **(80c:03060)**

28Bxx Measures and integrals with values in abstract spaces

28B05 Vector-valued measures and integrals [See also 46G10.]

Banerjee, Utpal On linear representation of vector measures. **80h:28009**
Berberian, S. K. Produit de convolution des mesures opératorielles. **80d:28021**
Birman, M. Š. (*with* Veršik, A. M.; Solomjak, M. Z.) The product of commuting spectral measures may fail to be countably additive. (Russian) **80h:28010**
Butković, Davor On vector measures. **80k:28011**
Christensen, Mark J. Extension theorems for operator-valued measures. **80e:28011**
Duchoň, Miloslav Product of dominated vector measures. (Russian summary) **80f:28007**
Dutta, M. *See* **Tewari, U. B., 80j:28016**
Edgar, G. A. On the Radon-Nikodým property and martingale convergence. **80e:28012**
Graves, William H. (*with* Sentilles, F. Dennis) The extension and completion of the universal measure and the dual of the space of measures. **80j:28014**
Hackenbroch, Wolfgang On the Radon-Nikodým theorem for operator measures and its applications to prediction and linear systems theory. **80f:28008**
Irle, Albrecht On the compactness of vector-valued transition measures. **80k:28012**
Kalton, Nigel (*with* Turett, Barry; Uhl, J. J., Jr.) Basically scattered vector measures. **80k:28013**
Khurana, Surjit Singh Strong measurability in Fréchet spaces. **80j:28015**
Kranz, Przemysław Control measure problem in some classes of F-spaces. **80f:28009**
Labuda, Iwo On integration and Suslin spaces. **80h:28011**
Mauldin, R. Daniel Some effects of set-theoretical assumptions in measure theory. **80k:28021**
Ohba, Sachio Vector measure theory. (Japanese) **80h:28012**
Pastorová, Mária The absolute continuity of functions defined on the σ-ring generated by a ring. (Russian summary) **80e:28013**
Rogge, Lothar Eine Konvexitätsungleichung für Integrale in Fréchet-Räumen. **80a:28004**
Sastry, A. S. (*with* Sastry, K. P. R.) Measure extensions of set functions over lattices of sets. **80h:28013**
Sastry, K. P. R. *See* **Sastry, A. S., 80h:28013**
Sentilles, F. Dennis *See* **Graves, William H., 80j:28014**
Solomjak, M. Z. *See* **Birman, M. Š.; et al., 80h:28010**
Story, Donald P. A Fubini theorem for inductive tensor product measures. **80e:28014**
Swartz, Charles Products of vector measures by means of Fubini's theorem. (Russian summary) **80f:28010**
A generalized Orlicz-Pettis theorem and applications. **80m:28011**
Tewari, U. B. (*with* Dutta, M.) Continuously translating vector-valued measures. **80j:28016**
Turett, Barry *See* **Kalton, Nigel; et al., 80k:28013**
Turpin, Philippe Boundedness problems for finitely additive measures. **80a:28005**
Uhl, J. J., Jr. The Radon-Nikodým property: a point of view. **80a:28015**
See also **Kalton, Nigel; et al., 80k:28013**
Veršik, A. M. *See* **Birman, M. Š.; et al., 80h:28010**

Secondary classifications:

Alò, Richard A. (*with* de Korvin, André) Application of bases to the study of measures and operators on measure spaces. **(80a:47044)**
(*with* de Korvin, André) Some approximation theorems for vector measures. **(80g:46041)**
Bru, Bernard (*with* Heinich, Henri) Sur l'espérance des variables aléatoires vectorielles. (English summary) **(80c:60011)**
Chatterji, S. D. The Radon-Nikodým property. **(80h:46064)**
Diestel, Joe Some problems arising in connection with the theory of vector measures. **(80d:46077)**
Egghe, L. On the Radon-Nikodým property, and related topics in locally convex spaces. **(80d:46078)**
Fremlin, David H. (*with* Talagrand, Michel) A decomposition theorem for additive set-functions, with applications to Pettis integrals and ergodic means. **(80k:28004)**
Heinich, Henri Sur les mesures vectorielles signées. (English summary) **(80j:46037)**
See also **Bru, Bernard, (80c:60011)**
Jajte, Ryszard Orthogonally scattered Gleason measures. (Russian summary) **(80m:46042)**
Kluvánek, Igor Cylindrical measures and vector measures. **(80c:46051)**
de Korvin, André *See* **Alò, Richard A., (80a:47044)** *and* **Alò, Richard A., (80g:46041)**
Linde, Werner Operator ideals and vector measures. **(80j:46071)**
Nagano, Yoshihiko *See* **Ohba, Sachio, (80d:46079)**
Nagy, B. Characterizations of spectral operators. **(80m:47031)**
Nelson, Robert R. The spaces of functions of finite upper p-variation. **(80i:46027)**
Ohba, Sachio (*with* Nagano, Yoshihiko) Locally convex spaces with the property (Σ). **(80d:46079)**
Saito, Masahiko On the non-standard representation of linear mappings from a function space. **(80a:03091)**
Saworotnow, Parfeny P. H^*-algebra valued measure on a locally compact space. **(80f:46057)**
Shuchat, Alan Spectral measures and homomorphisms. **(80a:47053)**
Talagrand, Michel *See* **Fremlin, David H., (80k:28004)**

28B10 Group- or semigroup-valued measures and integrals

Belley, Jean-Marc (*with* Morales, Pedro) Régularité d'une fonction d'ensembles à valeurs dans un groupe topologique. **80i:28022**
Delanghe, R. (*with* Impens, C.) N-semigroups as codomain of measures. **80h:28014**
Herer, Wojciech On the extension of measures with values in a topological group. **80j:28017**
Impens, C. *See* **Delanghe, R., 80h:28014**
Khurana, Surjit Singh Submeasures and decomposition of measures. **80i:28023**
Lipecki, Z. Decomposition theorems for Boolean rings, with applications to semigroup-valued measures. **80d:28022**
Maljugin, S. A. The topology of covering sets and continuous extension of outer measures. (Russian) **80i:28024**
Morales, Pedro *See* **Belley, Jean-Marc, 80i:28022**
Ohba, Sachio Product of measures. II. (Japanese summary) **80i:28025**
Saženkov, A. N. Boundedness of vector-valued outer measures. (Russian) **80i:28026**
Traynor, Tim The group-valued Lebesgue decomposition. **80e:28016**

28B15 Measures and integrals with values in general ordered systems

Akmalov, N. A. Integration on continuous topological semifields. (Russian) **80k:28014**
Brehmer, Siegfried Algebraic characterisation of measure and integral by the method of Carathéodory. **80j:28018**
Bru, Bernard Espérance d'ordre. (English summary) **80m:28012**
Potocký, Rastislav On random variables having values in a vector lattice. (Russian summary) **80f:28011**
On the extension of measures. (Russian summary) **80f:28012**

Secondary classifications:

Henstock, R. Integration, variation and differentiation in division spaces. **(80d:26011)**

28B20 Set-valued measures; integration of set-valued functions; measurable selections [See also 54C60, 54C65.]

Alò, Richard A. (*with* de Korvin, André; Roberts, Charles E., Jr.) *p*-integrable selectors of multimeasures. **80i:28027**
Byrne, Charles L. Remarks on the set-valued integrals of Debreu and Aumann. **80a:28006**
Costé, A. (*with* Pallu de la Barrière, R.) Radon-Nikodým theorems for set-valued measures whose values are convex and closed. **80h:28015**
Ioffe, Alexandre D. Single-valued representation of set-valued mappings. **80e:28017**
de Korvin, André *See* **Alò, Richard A.; et al., 80i:28027**
Le Van Tu The range of multimeasure. **80b:28008**
The Radon-Nikodým theorem for multimeasures. **80b:28009**
Levin, V. L. Borel cross sections of many-valued mappings. (Russian) **80e:28018**
Mägerl, G. A unified approach to measurable and continuous selections. **80d:28023**
Nishiura, Togo Two counterexamples for measurable relations. **80d:28024**
Pallu de la Barrière, R. *See* **Costé, A., 80h:28015**
Roberts, Charles E., Jr. *See* **Alò, Richard A.; et al., 80i:28027**
Rupp, Werner Riesz-presentation of additive and σ-additive set-valued measures. **80b:28010**

Secondary classifications:

Burgess, John P. Two selection theorems. **(80h:03069)**
Saint-Pierre, J. Points exposés d'une multiapplication à valeurs convexes de $\mathbf{R}^n$. **(80g:54025)**

28B99 None of the above, but in this section

Hafizov, M. H. Uniform boundedness of a family of set functions. (Russian) **80g:28010**
Henson, C. Ward Unbounded Loeb measures. **80b:28011**
Salvadori, Anna Various concepts of "quasi-additivity". (Italian) **80g:28011**

Secondary classifications:

Hafizov, M. H. Systems of sets with set functions. (Russian) **(80m:28003)**

28Cxx Measures on spaces with additional structure [See also 46G12, 58C35, 58D20.]

28C05 Integration theory via linear functionals (Radon measures, Daniell integrals, etc.), representing measures

Bellow, Alexandra Mesures de Radon et espaces relèvement compacts. (English summary) **80j:28019**
Caby, Errol The weak convergence of uniform measures. **80f:28013**
Chatfield, J. A. A representation theorem for operators on a space of interval functions. **80a:28067**
Dealbes, Ali Mesures sur les espaces uniformes de type (σ_1^∞). **80j:28020**
Caractérisation des mesures qui intègrent toutes les fonctions réelles mesurables. **80j:28021**
Dobrakov, Ivan An elementary proof of the Fubini-Stone theorem. (Russian summary) **80f:28014**
A concept of measurability for the Daniell integral. (Russian summary) **80d:28025**
Fremlin, David H. (*with* Talagrand, Michel) On the representation of increasing linear functionals on Riesz spaces by measures. **80c:28009**
Jiménez Guerra, Pedro Stability of tensor products of Radon measures of type $(\mathfrak{C})$. **80f:28015**
Talagrand, Michel *See* **Fremlin, David H., 80c:28009**

Secondary classifications:

Baker, James D. (*with* Dyer, James A.) A Stieltjes integral formula for Daniell functionals. **(80m:26010)**
Citric'kiĭ, O. Ē. *See* **Miroujuk, L. N., (80d:60077)**
Dyer, James A. *See* **Baker, James D., (80m:26010)**
Fichera, Gaetano Homology spaces of k-measures and related inequalities for differential forms. **(80k:58006)**
Metzler, Richard C. Uniqueness of extensions of positive linear functions. **(80f:46027)**
Miroujuk, L. N. (*with* Citric'kiĭ, O. Ē.) On the Riesz-Markov theorem for stochastic vector measures. (Russian. English summary) **(80d:60077)**
Pham Phu Hien Sur un sous-espace vectoriel de points quasi-réguliers relatifs à un système dynamique défini sur un espace vectoriel topologique. (English summary) **(80k:46078)**

28C10 Measures on topological groups, Haar measures, invariant measures [See also 43A05.]

Graves, William H. Universal Lusin measurability and subfamily summable families in abelian topological groups. **80b:28012**
Harazišvili, A. B. On Vitali's theorem on nonmeasurable sets. (Russian. Georgian and English summaries) **80d:28026**
Jamison, Benton (*with* Sine, Robert) Unique ergodicity for certain random translations. **80d:28027**
Kulakova, V. G. Invariant means and operators of conditional mathematical expectation. (Russian. English summary) **80d:28028**
Mirotin, A. R. (*with* Muhin, V. V.) Invariant measures that extend from a semigroup to the group of its quotients. (Russian) **80b:28013**
Muhin, V. V. Quasi-invariant measures on stable subsets of locally compact groups. (Russian. English summary) **80g:28012a**
Left-invariant measures on open stable subsets of locally compact metrizable groups. (Russian) **80g:28012b**
See also **Mirotin, A. R., 80b:28013**
Ng, Kung Fu Invariant measures for compact affine semi-groups. **80b:28014**
Nižaradze, G. V. Regular systems which are not Vitali systems. (Russian. Georgian and English summaries) **80d:28029**
Pianigiani, Giulio Absolutely continuous invariant measures for the process $x_{n+1} = Ax_n(1 - x_n)$. (Italian summary) **80h:28016**
Sine, Robert *See* **Jamison, Benton, 80d:28027**
Šipoš, Ján Integrals on lattice-ordered groups. (Russian summary) **80f:28016**
Skudlarek, Hans-Ludwig Une mesure maximale dont le support ne contient pas de points extrémaux. (English summary) **80d:28030**

Secondary classifications:

Dani, S. G. On invariant measures, minimal sets and a lemma of Margulis. **(80d:58039)**
Dzinotyiweyi, Heneri A. M. (*with* Sleijpen, Gérard L. G.) A note on measures on foundation semigroups with weakly compact orbits. **(80f:43002)**
Fremlin, David H. (*with* Talagrand, Michel) A decomposition theorem for additive set-functions, with applications to Pettis integrals and ergodic means. **(80k:28004)**
Margulis, G. A. Factor groups of discrete subgroups and measure theory. (Russian) **(80k:22005)**
Finiteness of quotient groups of discrete subgroups. (Russian) **(80k:22006)**
Samuélidès, Manuel Mesures de Haar et W^*-couple d'un groupoïde mesuré. (English summary) **(80k:46079)**
Seda, Anthony Karel Transformation groupoids and bundles of Banach spaces. **(80k:58011)**
Sine, Robert Structure and asymptotic behavior of abstract dynamical systems. **(80d:54051)**
Sleijpen, Gérard L. G. *See* **Dzinotyiweyi, Heneri A. M., (80f:43002)**
Székely, Gábor Algebraic dimension of semigroups with application to invariant measures. **(80i:22008)**
Talagrand, Michel Barycentres de sous-mesures pathologiques. **(80g:43002)**
See also **Fremlin, David H., (80k:28004)**

28C15 Measures on topological spaces (regularity of measures, etc.)

Flachsmeyer, Jürgen (*with* Lotz, Siegfried) A survey on hyperdiffuse measures. I. **80i:28028**
Flam, Sjur D. On conditional compactness in the space of probability measures. **80h:28017**
Frolík, Zdeněk (*with* Pachl, Jan K.; Zahradník, Miloš) Examples of uniform measures. **80e:28019**
Gruenhage, Gary (*with* Pfeffer, Washek F.) When inner regularity of Borel measures implies regularity. **80c:28010**
Kuczma, Marcin E. Differentiation of implicit functions and Steinhaus' theorem in topological measure spaces. **80f:28017**
Lotz, Siegfried A note on Borel measures with support and τ-smooth Borel measures. **80h:28018**
See also **Flachsmeyer, Jürgen, 80i:28028**
Maeda, Michie The cylindrical measures on some Banach space. **80b:28015**
Mauldin, R. Daniel The existence of non-measurable sets. **80b:28016**
Okada, Susumu Supports of Borel measures. **80f:28018**
Pachl, Jan K. *See* **Frolík, Zdeněk; et al., 80e:28019**
Pfeffer, Washek F. *See* **Gruenhage, Gary, 80c:28010**
Vladimirskiĭ, Ju. N. On conditions for extendibility of a cylindrical measure in a conjugate Banach space to Radon measure. (Russian. English summary) **80h:28019**
Zahradník, Miloš *See* **Frolík, Zdeněk; et al., 80e:28019**

Secondary classifications:

De Masi, A. One-dimensional DLR invariant measures are regular. **(80h:82017)**
Hegde, Shankar Some smoothness properties of measures on topological spaces. **(80k:46034)**
Janssen, Arnold Some remarks on the decomposition of kernels. **(80d:28017)**
Losert, Viktor On the existence of uniformly distributed sequences in compact topological spaces. I. **(80f:10062a)**
On the existence of uniformly distributed sequeness in compact topological spaces. II. **(80f:10062b)**
Oxtoby, John C. (*with* Prasad, Vidhu S.) Homeomorphic measures in the Hilbert cube. **(80h:28006)**
Prasad, Vidhu S. *See* **Oxtoby, John C., (80h:28006)**
von Weizsäcker, Heinrich Strong measurability, liftings and the Choquet-Edgar theorem. **(80f:46046)**

28C20 Measures and integrals in function spaces (Wiener measure, Gauss measure, etc.) [See also 58D20, 60B11.]

Becker, Richard Some consequences of a kind of Hahn-Banach's theorem. **80g:28013**
Christensen, Jens Peter Reus The small ball theorem for Hilbert spaces. **80g:28014**
Dollard, John D. (*with* Friedman, Charles N.) Product integration of measures and applications. **80i:28029**
Friedman, Charles N. *See* **Dollard, John D., 80i:28029**
Gattinger, Matthias Representation theorems for operators and measures on abstract Wiener spaces. **80d:28031**
Koval'čik, Ĭ. M. Computation of multiple Wiener integrals for certain classes of functionals. (Russian. English summary) **80g:28015**

Kozak, P. P. A transformation of multiple Wiener integrals in a space of continuous functions of several variables under a nonlinear change of variables. (Russian) **80f:28019**

Kuo, Hui Hsiung An example of quasi-invariant cylindrical measure. **80d:28032**

Liu, T. F. Functional integrals related to a noncontraction semigroup. **80i:28030**

Maeda, Michie On type(τ, 1) cylindrical measures on Banach spaces with Schauder bases. **80i:28031**

Maĭkov, E. V. (*with* Romanov, V. A.) Continuous translations of the Feynman measure. (Russian. French summary) **80g:28016**

Noverraz, Philippe Gaussian measure of polar sets in separable Banach spaces. **80k:28015**

Preiss, David Gaussian measures and covering theorems. **80e:28020**

Rečan, Beloslav On the Carathéodory method of the extension of measures and integrals. (Russian summary) **80f:28020**

Romanov, V. A. Limits of quasi-invariant measures in Hilbert space. (Russian) **80e:28021**

See also **Maĭkov, E. V., 80g:28016**

Shimomura, Hiroaki Quasi-invariant measures on $\mathbf{R}^\infty$ and their ergodic decomposition. **80e:28022**

Vladimirskiĭ, Ju. N. Some topological properties of countably additive cylindrical measures. (Russian. English summary) **80h:28020**

Secondary classifications:

Carmona, René Tensor product of Gaussian measures. **(80a:60039)**

Clafaloni, M. Existence of path integral for reggeon quantum mechanics. **(80i:81076)**

Danos, M. Singularities in quantum field theory. (Italian and Russian summaries) **(80d:81028)**

Deininghaus, U. (*with* Graham, R.) Nonlinear point transformations and covariant interpretation of path integrals. **(80k:81037)**

Dobrušin, R. L. (*with* Minlos, R. A.) Polynomials in a generalized random field and its moments. (Russian. English summary) **(80j:60055)**

Fursikov, A. V. *See* **Višik, M. I., (80i:35149)**

Gadžiev, V. G. A class of generalized functions defined on a Hilbert space with a Gaussian measure. (Russian. English summary) **(80d:46068)**

Gielerak, Roman Mayer equations for Bose field theoretical models. **(80f:81080)**

Graham, R. *See* **Deininghaus, U., (80k:81037)**

Hochberg, Kenneth J. A signed measure on path space related to Wiener measure. **(80i:60111)**

Kadob'jans'kiĭ, R. M. *See* **Kozak, P. P., (80k:45012)**

Kerler, W. Nonlinear effects in path integrals and quantization of constrained systems. **(80k:81043)**

Klauder, John R. Continuous representations and path integrals, revisited. **(80i:81012)**

Kluvánek, Igor Représentations intégrales d'évolutions perturbées. (English summary) **(80d:46087)**

Kozak, P. P. (*with* Kadob'jans'kiĭ, R. M.) Representation of the solution of a characteristic problem for a system of nonlinear integro-differential equations as a Wiener integral. (Russian. English summary) **(80k:45012)**

Krée, Paul Methods of functional analysis in the study of random phenomena. **(80f:60008)**

Langouche, F. (*with* Roekaerts, D.; Tirapegui, E.) Discretization problems of functional integrals in phase space. **(80k:81033)**

Linde, Werner Gaussian measures on Banach spaces. **(80d:47032)**

Mandrekar, V. Characterization of Banach space through validity of Bochner theorem. **(80k:60011)**

Minlos, R. A. *See* **Dobrušin, R. L., (80j:60055)**

Nash, Charles ★Relativistic quantum fields. **(80f:81082)**

Pesquera, L. (*with* Santos, Emilio) Errata: "Path integrals in stochastic electrodynamics" [Lett. Nuovo Cimento (2) **20** (1977), no. 9, 308–312; MR **56** #10626]. **(80k:81045)**

Roekaerts, D. *See* **Langouche, F.; et al., (80k:81033)**

Santos, Emilio *See* **Pesquera, L., (80k:81045)**

Sharan, Pankaj Star-product representation of path integrals. **(80k:81046)**

Takahashi, Yasuji Partially admissible shifts on linear topological spaces. **(80m:60011)**

Tirapegui, E. *See* **Langouche, F.; et al., (80k:81033)**

Truman, Aubrey Some applications of vector space measures to non-relativistic quantum mechanics. **(80a:81047)**

Uglanov, A. V. On a class of Hilbert measures. (Russian) **(80j:60015)**

Višik, M. I. (*with* Fursikov, A. V.) Translationally homogeneous statistical solutions and individual solutions with infinite energy of a system of Navier-Stokes equations. (Russian) **(80i:35149)**

Yeh, J. Transformation of conditional Wiener integrals under translation and the Cameron-Martin translation theorem. **(80e:60094)**

28C99 None of the above, but in this section

Secondary classifications:

Kuo, Hui Hsiung Differential calculus for measures on Banach spaces. **(80c:46052)**

Talagrand, Michel Comparaison des boreliens d'un espace de Banach pour les topologies fortes et faibles. **(80d:46033)**

28Dxx Measure-theoretic ergodic theory [See also 22D40, 47A35, 54H20, 58Fxx, 60Fxx, 60G10.]

Billingsley, Patrick ★Ergodic theory and information. **80b:28017**

Schmidt, Klaus Unique ergodicity and related problems. **80j:28022**

Secondary classifications:

Mackey, George W. ★Unitary group representations in physics, probability, and number theory. **(80i:22001)**

Osterwalder, Konrad (*with* Seiler, Erhard) Lattice gauge theories. **(80c:81083)**

Seiler, Erhard *See* **Osterwalder, Konrad, (80c:81083)**

Tuominen, Pekka (*with* Tweedie, Richard L.) Markov chains with continuous components. **(80d:60089)**

Tweedie, Richard L. *See* **Tuominen, Pekka, (80d:60089)**

28D05 Measure-preserving transformations

Aaronson, Jon Ergodic theory for inner functions of the upper half plane. (French summary) **80b:28018**

On the pointwise ergodic behaviour of transformations preserving infinite measures. **80i:28032**

Akcoglu, Mustafa A. (*with* Sucheston, Louis) A ratio ergodic theorem for superadditive processes. **80h:28021**

Alpern, Steve A topological analog of Halmos' conjugacy lemma. **80d:28034**

Approximation to and by measure preserving homeomorphisms. **80d:28033**

Measure preserving homeomorphisms of $\mathbf{R}^n$. **80m:28014b**

Boyarsky, Abraham (*with* Scarowsky, Manny) On a class of transformations which have unique absolutely continuous invariant measures. **80i:28033**

Burton, Robert M., Jr. *See* **Shields, Paul C., 80b:28027**

Conze, Jean-Pierre Transformations cylindriques et mesures finies invariantes. **80h:28022**

Dehnad, Khosrow A partition which is not finitely codable from Markov chains. **80b:28019**

Ellis, Martin H. (*with* Friedman, Nathaniel A.) On eventually weakly wandering sequences. **80c:28011a**

(*with* Friedman, Nathaniel A.) Gap sequences and eventually weakly wandering sequences. **80c:28011b**

Catching and missing finite sets. **80b:28020**

(*with* Friedman, Nathaniel A.) Subsequence generators for ergodic group translations. **80b:28022**

(*with* Friedman, Nathaniel A.) Sweeping out on a set of integers. **80b:28021**

Sweeping out under a collection of transformations. **80d:28035**

Fellgett, Robin A class of flows with quasidiscrete spectrum. **80k:28023**

Friedman, Nathaniel A. *See* **Ellis, Martin H., 80b:28021; Ellis, Martin H., 80b:28022; Ellis, Martin H., 80c:28011a** *and* **Ellis, Martin H., 80c:28011b**

Furstenberg, Hillel (*with* Weiss, Benjamin) The finite multipliers of infinite ergodic transformations. **80b:28023**

Ganihodžaev, N. N. *See* **Vinokurov, V. G., 80d:28038**

Góra, Paweł On small stochastic perturbations of the one-sided subshift of finite type. (Russian summary) **80h:28024**

Helson, Henry (*with* Parry, William) Cocycles and spectra. **80d:28036**

del Junco, Andrés A simple measure-preserving transformation with trivial centralizer. **80i:28034**

(*with* Rahe, M.) Finitary codings and weak Bernoulli partitions. **80f:28021**

Keller, Gerhard Ergodicité et mesures invariantes pour les transformations dilatantes par morceaux d'une région bornée du plan. (English summary) **80k:28016**

Kowalski, Zbigniew S. Bernoulli properties of piecewise monotonic transformations. (Russian summary) **80j:28023a**

Invariant measure for piecewise monotonic transformation has a positive lower bound on its support. (Russian summary) **80j:28023b**

Piecewise monotonic transformations and their invariant measure. (Russian summary) **80j:28023c**

Krengel, Ulrich On the speed of convergence in the ergodic theorem. **80k:28025**

Ledrappier, François En général, un semi-flot spécial est exact. (English summary) **80h:28026**

Lind, D. A. Split skew products, a related functional equation, and specification. **80e:28023**

Ergodic group automorphisms and specification. **80j:28024**

Lo Bello, Anthony Ergodic transformations of Lebesgue spaces. **80e:28024**

Marcus, Brian (*with* Petersen, Karl) Balancing ergodic averages. **80m:28013**

Miller, Harry I. On the permutation functions of H. Steinhaus. (Serbo-Croatian summary) **80e:28025**

Navarro-Bermúdez, Francisco J. Topologically equivalent measures in the Cantor space. **80k:28017**

Newton, D. On canonical factors of ergodic dynamical systems. **80c:28012**

Ornstein, Donald S. Guessing the next output of a stationary process. **80b:28024**

Palmer, Marion Rachel (*with* Parry, William; Walters, Peter) Large sets of endomorphisms and of g-measures. **80b:28025**

Parry, William *See* **Palmer, Marion Rachel; et al., 80b:28025** *and* **Helson, Henry, 80d:28036**

Petersen, Karl *See* **Marcus, Brian, 80m:28013**

Pomeau, Y. Stochastic behavior of simple dynamical systems. **80k:28027**

Prasad, Vidhu S. Ergodic measure preserving homeomorphisms of $\mathbf{R}^n$. **80m:28014a**

(Quiring, D.) *See* **Robertson, James B., 80k:28018**

Rahe, M. *See* **del Junco, Andrés, 80f:28021**

Ratner, Marina Bernoulli flow over maps of the interval. **80b:28026**

Robertson, James B. On the discrete part of a measure preserving transformation and a paper by D. Quiring and R. J. Turek: "A stacking method in ergodic theory" [Indiana Univ. Math. J. **25** (1976), no. 6, 493–498; MR **54** #2916]. **80k:28018**

Rudolph, Daniel J. If a two-point extension of a Bernoulli shift has an ergodic square, then it is Bernoulli. **80b:28028a**

If a finite extension of a Bernoulli shift has no finite rotation factors, it is Bernoulli. **80b:28028b**

Counting the relatively finite factors of a Bernoulli shift. **80b:28028c**

Smooth orbit equivalence of ergodic $\mathbf{R}^d$ actions, $d > 2$. **80g:28017**

Scarowsky, Manny *See* **Boyarsky, Abraham, 80i:28033**

Schmidt, Klaus Unique ergodicity for quasi-invariant measures. **80f:28022**

Schweiger, F. A modified Jacobi-Perron algorithm with explicitly given invariant measure. **80i:28035**

Series, Caroline The Rohlin tower theorem and hyperfiniteness for actions of continuous groups. **80j:28025**
Shields, Paul C. (*with* Burton, Robert M., Jr.) A skew-product which is Bernoulli. **80h:28027**
Shimano, Takashi An invariant of systems in the ergodic theory. **80c:28013**
Shimomura, Hiroaki Ergodic decomposition of quasi-invariant measures. **80f:28023**
Smorodinsky, Meir (*with* Thouvenot, J.-P.) Bernoulli factors that span a transformation. **80d:28037**
Sucheston, Louis *See* **Akcoglu, Mustafa A., 80h:28021**
Szlenk, Wiesław On l^∞ dynamical systems. (Russian summary) **80j:28026**
Thaler, Maximilian Ergodic properties of real transformations. **80j:28027**
σ-endliche invariante Masse für die Engelschen Reihen. **80j:28028**
Thouvenot, J.-P. *See* **Smorodinsky, Meir. 80d:28037**
Turek, Richard J. An approach to completely ergodic transformations and a stacking method. **80b:28028**
See also **Robertson, James B., 80k:28018**
Varma, A. K. Some inequalities of algebraic polynomials having real zeros. **80k:28019**
Vinokurov, V. G. (*with* Ganihodžaev, N. N.) Conditional functions in the trajectory theory of dynamical systems. (Russian) **80d:28038**
Wagner, Gerold The ergodic behaviour of piecewise monotonic transformations. **80m:28015**
Walters, Peter *See* **Palmer, Marion Rachel; et al., 80b:28025**
Weiss, Benjamin *See* **Furstenberg, Hillel, 80b:28023**
Whitman, P. N. Skew-products with simple approximations. **80d:28039**
Wong, Sherman Some metric properties of piecewise monotonic mappings of the unit interval. **80c:28014**

Secondary classifications:

Bandyopadhyay, N. *See* **Raychaudhuri, A. K., (80a:83051)**
Brunk, H. D. (*with* Martin, N. F. G.) An inequality involving powers of sums of powers. **(80b:26023)**
Bunimovič, L. A. On the ergodic properties of nowhere dispersing billiards. **(80h:58037)**
Chenciner, A. Stabilité structurelle et ergodicité (ou catégorie et mesure). (English summary) **(80j:58001)**
Ferrero, P. Entropie topologique microcanonique. **(80b:54050)**
Flytzanis, Elias On a vector-valued ergodic theorem. **(80l:47009)**
Fong, Humphrey Ratio and stochastic ergodic theorems for superadditive processes. **(80b:47011)**
Furstenberg, Harry (*with* Glasner, Shmuel) On the existence of isometric extensions. **(80c:54047)**
Glasner, Shmuel A note on weakly mixing functions. **(80h:54052)**
See also **Furstenberg, Harry, (80c:54047)**
Jacobs, Konrad Stochastics and mechanics. **(80k:70014)**
Johnson, Russell A. Measurable subbundles in linear skew-product flows. **(80c:34045)**
Lerman, L. M. *See* **Vainštein, A. G., (80b:58049)**
Liardet, Pierre Répartition et ergodicité. **(80d:10073)**
Martin, N. F. G. *See* **Brunk, H. D., (80b:26023)**
Miles, G. (*with* Thomas, R. K.) Generalized torus automorphisms are Bernoullian. **(80c:22011)**
Niederreiter, Harald Ergodic sequences of measures and a problem in additive number theory. **(80e:10038)**
Pianigiani, Giulio Absolutely continuous invariant measures for the process $x_{n+1} = Ax_n(1 - x_n)$. (Italian summary) **(80h:28016)**
Pogosjan, S. K. Asymptotic expansion of the logarithm of a partition function. (Russian. Armenian and English summaries) **(80a:82014)**
Raychaudhuri, A. K. (*with* Bandyopadhyay, N.) Charged dust distributions in equilibrium in Brans-Dicke theory. **(80a:83051)**
Tagi-Zade, A. T. The functional equation $Y(f(x)) = e^{\alpha g(x)} Y(x)$. (Russian) **(80e:39007)**
Thomas, R. K. *See* **Miles, G., (80c:22011)**
de la Torre, Alberto Ergodic H^1 spaces. **(80f:46029)**
Vainštein, A. G. (*with* Lerman, L. M.) Uniform structures and the equivalence of diffeomorphisms. (Russian) **(80b:58049)**

28D10 One-parameter continuous families of measure-preserving transformations

Chersi, Franco Finitely additive invariant measures. (Italian summary) **80k:28020**
Eberlein, Ernst Some new results in the theory of flows on measure spaces. **80e:28026**
Ellis, Martin H. (*with* Steele, J. Michael) Catching small sets under flows. (French summary) **80e:28027**
Feldman, Jacob Reparametrization of probability-preserving n-flows. **80m:28016**
Feligett, Robin Representing ergodic flows as flows built under functions with finite range. **80d:28040**
Jakobson, M. V. Topological and metric properties of one-dimensional endomorphisms. (Russian) **80c:28015**
Kreĭnovič, V. Ja. *See* **Sine, Robert, 80k:28021**
Petersen, Karl The converse of the dominated ergodic theorem. **80e:28028**
Sine, Robert (*with* Kreĭnovič, V. Ja.) Remarks on billiards. **80k:28021**
Steele, J. Michael *See* **Ellis, Martin H., 80e:28027**
Tagi-Zade, A. T. Change of time in special flows. (Russian) **80h:28029**

Secondary classifications:

Akcoglu, Mustafa A. (*with* Krengel, Ulrich) A differentiation theorem for additive processes. **(80d:47007)**
Johnson, Russell A. Ergodic theory and linear differential equations. **(80c:34044)**
Krengel, Ulrich *See* **Akcoglu, Mustafa A., (80d:47007)**
Rieffel, Marc A. The type of group measure space von Neumann algebras. **(80g:46053)**
Scarpellini, Bruno Entropy and nonlinear prediction. **(80k:60050)**
Varma, A. K. Some inequalities of algebraic polynomials having real zeros. **(80k:28019)**

28D15 General groups of measure-preserving transformations

Bricmont, Jean On the transport of equilibrium states. (French summary) **80b:28029**
Burton, Robert M., Jr. An asymptotic definition of K-groups of automorphisms and a non-Bernoullian counter-example. **80d:28041**
Choksi, J. R. (*with* Kakutani, Shizuo) Residuality of ergodic measurable transformations and of ergodic transformations which preserve an infinite measure. **80d:28042**
Ellis, Martin H. (*with* Friedman, Nathaniel A.) Subset generators for nonsingular transformations. **80k:28022**
Friedman, Nathaniel A. *See* **Ellis, Martin H., 80k:28022**
Ganihodžaev, N. N. Trajectory decompositions of a Lebesgue space. (Russian) **80g:28018**
Kakutani, Shizuo *See* **Choksi, J. R., 80d:28042**
Kieffer, John C. The isomorphism theorem for generalized Bernoulli schemes. **80c:28016**
Ledrappier, François Un champ markovien peut être d'entropie nulle et mélangeant. (English summary) **80b:28030**
Miles, G. (*with* Thomas, R. K.) On the polynomial uniformity of translations of the n-torus. **80c:28017**
Rubštein, B. A. Normalizer of a diminishing sequence of measurable partitions. (Russian) **80m:28017**
Šavgulidze, E. T. An example of a measure which is quasi-invariant relative to the action of a group of diffeomorphisms of the circle. (Russian) **80a:28008**
Schmidt, Klaus A cylinder flow arising from irregularity of distribution. **80e:28029**
Thomas, R. K. *See* **Miles, G., 80c:28017**
Zimmer, Robert J. Ergodic actions and stochastic processes on groups and homogeneous spaces. **80h:28030**

Secondary classifications:

Brown, James R. Ergodic groups of substitution operators associated with algebraically monothetic groups. **(80h:22008)**
Dani, S. G. Some mixing multiparameter dynamical systems. **(80h:58038)**
(*with* Keane, Michael S.) Ergodic invariant measures for actions of $SL(2, \mathbb{Z})$. (French summary) **(80d:58038)**
Keane, Michael S. *See* **Dani, S. G., (80d:58038)**
Moore, Calvin C. (*with* Zimmer, Robert J.) Groups admitting ergodic actions with generalized discrete spectrum. **(80m:22008)**
Moulin-Ollagnier, Jean (*with* Pinchon, Didier) Une nouvelle démonstration du théorème de E. Følner. (English summary) **(80a:43004)**
Pianigiani, Giulio (*with* Yorke, James A.) Expanding maps on sets which are almost invariant. Decay and chaos. **(80l:58030)**
Pinchon, Didier *See* **Moulin-Ollagnier, Jean, (80a:43004)**
Yorke, James A. *See* **Pianigiani, Giulio, (80l:58030)**
Zimmer, Robert J. Uniform subgroups and ergodic actions of exponential Lie groups. **(80c:22012)**
An analogue of the Mostow-Margulis rigidity theorems for ergodic actions of semisimple Lie groups. **(80m:22016)**
See also **Moore, Calvin C., (80m:22008)**

28D20 Entropy and other invariants

Aaronson, Jon On the categories of ergodicity when the measure is infinite. **80m:28018**
Adler, Roy (*with* Marcus, Brian) Finitistic coding for shifts of finite type. **80l:28036**
Akcoglu, Mustafa A. (*with* del Junco, Andrés; Rahe, M.) Finitary codes between Markov processes. **80d:28043**
Alpern, Steve Generic properties of measure preserving homeomorphisms. **80m:28019**
David, Karl A construction of uncountably many weak von Neumann transformations. **80m:28020a**
Erratum to: "A construction of uncountably many weak von Neumann transformations" [Trans. Amer. Math. Soc. **257** (1980), no. 2, 397–410]. **80m:28020b**
Friedman, Nathaniel A. Mixing transformations in an infinite measure space. **80e:28030**
Helmberg, Gilbert Some remarks on ε-independence of partitions and on topological Rochlin sets. **80j:28029**
del Junco, Andrés *See* **Akcoglu, Mustafa A.; et al., 80d:28043**
Keane, Michael S. (*with* Smorodinsky, Meir) Bernoulli schemes of the same entropy are finitarily isomorphic. **80f:28024**
(*with* Smorodinsky, Meir) The finitary isomorphism theorem for Markov shifts. **80h:28031**
Marcus, Brian (*with* Newhouse, Sheldon) Measures of maximal entropy for a class of skew products. **80j:28030**
See also **Adler, Roy, 80l:28036**
Moulin-Ollagnier, Jean (*with* Pinchon, Didier) Groupes pavables et principe variationnel. **80g:28019**
Neuwirth, J. H. Ergodicity of some mappings of the circle and the line. **80e:28031**
Newhouse, Sheldon *See* **Marcus, Brian, 80j:28030**
Ornstein, Donald S. (*with* Weiss, Benjamin) Ergodic theory of amenable group actions. I. The Rohlin lemma. **80j:28031**
Parry, William An information obstruction to finite expected coding length. **80j:28032**
Peters, Justin Entropy on discrete abelian groups. **80l:28037**
Pinchon, Didier *See* **Moulin-Ollagnier, Jean, 80g:28019**
Rahe, M. *See* **Akcoglu, Mustafa A.; et al., 80d:28043**
Rudolph, Daniel J. Classifying the isometric extensions of a Bernoulli shift. **80g:28020**
Saleski, Alan On mixing and entropy. **80e:28032**
Smorodinsky, Meir *See* **Keane, Michael S., 80f:28024** *and* **Keane, Michael S., 80h:28031**
Stepin, A. M. Equidistribution of the entropy of amenable groups of transformations. (Russian. Azerbaijani and English summaries) **80f:28025**
Swanson, Laif Loosely Bernoulli Cartesian products. **80e:28033**

Tagi-Zade, A. T. Entropy properties of operations of amenable groups. (Russian) **80f:28026**
Weiss, Benjamin *See* **Ornstein, Donald S., 80j:28031**

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Agmon, N. *See* **Alhassid, Y.; et al., (80a:80011)**
Alhassid, Y. (*with* Agmon, N.; Levine, Raphael D.) An upper bound for the entropy and its applications to the maximal entropy problem. **(80a:80011)**
Block, Louis Simple periodic orbits of mappings of the initial. **(80m:58031)**
Bowen, Rufus Entropy and the fundamental group. **(80d:58049)**
Dani, S. G. Sequential entropy of generalised horocycles. **(80e:22013)**
Denker, Manfred (*with* Keane, Michael S.) Eine Bemerkung zur topologischen Entropie. (English summary) **(80a:54074)**
Derrida, B. (*with* Gervois, A.; Pomeau, Y.) Iteration of endomorphisms on the real axis and representation of numbers. (French summary) **(80g:10056)**
Ellis, Martin H. (*with* Friedman, Nathaniel A.) On eventually weakly wandering sequences. **(80c:28011a)**
(*with* Friedman, Nathaniel A.) Gap sequences and eventually weakly wandering sequences. **(80c:28011b)**
Friedman, Nathaniel A. *See* **Ellis, Martin H., (80c:28011a)** *and* **Ellis, Martin H., (80c:28011b)**
(Gallavotti, Giovanni) *See* **Ruelle, David, (80g:82017)**
Gal'perin, G. A. Systems of absolutely elastic spheres that move in space or in a vessel. (Russian) **(80f:58025)**
Gervois, A. *See* **Derrida, B.; et al., (80g:10056)**
Ikeda, Satoshi Some thermodynamical comments on the gravitational field. (Italian and Russian summaries) **(80a:83026)**
Jonker, Leo (*with* Rand, David) Une borne inférieure pour l'entropie de certaines applications de l'intervalle dans lui-même. (English summary) **(80b:58041)**
(*with* Rand, David) The nonwandering set of unimodal maps of the unit interval. **(80c:58037)**
Keane, Michael S. *See* **Denker, Manfred, (80a:54074)**
Krieger, Wolfgang On the periodic points of topological Markov chains. **(80j:54036)**
Ledrappier, François A variational principle for the topological conditional entropy. **(80j:54011)**
Levine, Raphael D. *See* **Alhassid, Y.; et al., (80a:80011)**
Pesin, Ja. B. Formulas for the entropy of the geodesic flow on a compact Riemannian manifold without conjugate points. (Russian) **(80j:58059)**
Pomeau, Y. *See* **Derrida, B.; et al., (80g:10056)**
Rand, David *See* **Jonker, Leo, (80b:58041)** *and* **Jonker, Leo, (80c:58037)**
(Rota, Gian-Carlo) *See* **Ruelle, David, (80g:82017)**
Rudolph, Daniel J. If a two-point extension of a Bernoulli shift has an ergodic square, then it is Bernoulli. **(80h:28028a)**
If a finite extension of a Bernoulli shift has no finite rotation factors, it is Bernoulli. **(80h:28028b)**
Counting the relatively finite factors of a Bernoulli shift. **(80h:28028c)**
Ruelle, David ★Thermodynamic formalism. **(80g:82017)**
An inequality for the entropy of differentiable maps. **(80f:58026)**
Integral representation of measures associated with a foliation. **(80d:58040)**
Invariant measures for a diffeomorphism which expands the leaves of a foliation. **(80d:58041)**
Sacksteder, Richard (*with* Shub, Michael) Entropy of a differentiable map. **(80c:58021)**
(*with* Shub, Michael) Entropy on sphere bundles. **(80e:58032)**
Shimano, Takashi An invariant of systems in the ergodic theory. **(80c:28013)**
Shub, Michael *See* **Sacksteder, Richard, (80c:58021)** *and* **Sacksteder, Richard, (80e:58032)**
Šil'nikov, L. P. Bifurcation theory of dynamical systems with homoclinic Poincaré curves. (Russian) **(80d:58048)**

28D99 None of the above, but in this section

Jabłoński, M. Continuity of invariant measures for Rényi's transformations. **80j:28033**
Kopf, Christoph Zur Struktur rein dissipativer Transformationen. **80i:28038**
Veech, William A. Interval exchange transformations. **80e:28034**

Secondary classifications:

Brunel, Antoine (*with* Sucheston, Louis) Sur l'existence de dominants exacts pour un processus sur-additif. (English summary) **(80e:60070)**
Buonomano, V. A limitation on Bell's inequality. **(80c:81006)**
Chicone, Carmen C. *See* **Swanson, R. C., (80f:58038)**
Coleman, Bernard D. On the thermodynamics of nonclassical systems. **(80i:80001)**
Dubins, Lester E. (*with* Pitman, Jim) A pointwise ergodic theorem for the group of rational rotations. **(80i:60062)**
Ebeling, W. (*with* Feistel, R.; Jimenez Montano, M. A.) On the theory of stochastic replication and evolution of molecular sequences. **(80d:92003)**
Feistel, R. *See* **Ebeling, W.; et al., (80d:92003)**
Green, Leon W. Applications of ergodic theory to geometry. **(80d:53022)**
Remarks on uniformly expanding horocycle parameterizations. **(80g:58040)**
Jimenez Montano, M. A. *See* **Ebeling, W.; et al., (80d:92003)**
Kai, Tohru *See* **Tomita, Kazuhisa, (80i:58031)**
Marchetto, D. Stepanoff flows on orientable surfaces. **(80d:58058)**
Pitman, Jim *See* **Dubins, Lester E., (80i:60062)**
Ruelle, David Analycity properties of the characteristic exponents of random matrix products. **(80e:58035)**
Sucheston, Louis *See* **Brunel, Antoine, (80e:60070)**
Swanson, R. C. (*with* Chicone, Carmen C.) Anosov does not imply infinitesimally ergodic. **(80f:58038)**
Tomita, Kazuhisa (*with* Kai, Tohru) Chaotic response of a limit cycle. **(80i:58031)**
Ustinov, Ju. I. Ergodic properties of expanding mappings of one-dimensional complexes. (Russian) **(80f:58027)**
Walters, Peter On the pseudo-orbit tracing property and its relationship to stability. **(80d:58055)**
Zaharevič, M. I. The behavior of trajectories and the ergodic hypothesis for quadratic mappings of a simplex. (Russian) **(80k:58070)**

30–XX FUNCTIONS OF A COMPLEX VARIABLE {For analysis on manifolds, see 58–XX.}

30–01 Elementary exposition, textbooks

Ahlfors, Lars V. ★Complex analysis. **80c:30001**
Beardon, A. F. ★Complex analysis. **80e:30001**
(Beckenbach, E. F.) *See* **Curtiss, John Hamilton, 80f:30001**
Bicadze, A. V. ★Grundlagen der Theorie analytischer Funktionen. **80c:30002**
Conway, John B. ★Functions of one complex variable. **80c:30003**
Curtiss, John Hamilton ★Introduction to functions of a complex variable. **80f:30001**
Evgrafov, M. A. ★Analytic functions. **80b:30001**
(Gelbaum, Bernard R.) *See* **Evgrafov, M. A., 80b:30001**
Markušević, A. I. ★Краткий курс теории аналитических функций. (Russian) [A short course in the theory of analytic functions] **80h:30001**
Muñoz Díaz, Jesús ★Curso de teoría de funciones. I. (Spanish) [A course of function theory. I] **80d:30001**
(Piri, Udo) *See* **Bicadze, A. V., 80c:30002**

Secondary classifications:

Endl, Kurt (*with* Luh, Wolfgang) ★Analysis. I. **(80e:26001a)**
(*with* Luh, Wolfgang) ★Analysis. II. **(80e:26001b)**
(*with* Luh, Wolfgang) ★Analysis. III. **(80e:26001c)**
Flügge, Siegfried ★Mathematische Methoden der Physik. I. **(80m:00001)**
Luh, Wolfgang *See* **Endl, Kurt, (80e:26001a); Endl, Kurt, (80e:26001b)** *and* **Endl, Kurt, (80e:26001c)**
Wendland, Wolfgang ★Elliptic systems in the plane. **(80k:35053)**

30–02 Advanced exposition (research surveys, monographs, etc.)

Davis, Burgess Brownian motion and analytic functions. **80j:30001**

30–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Bottazzini, Umberto Multiply-periodic functions in the correspondence between Hermite and Casorati. (Italian) **(80b:01009)**
Burkill, J. C. John Edensor Littlewood. **(80k:01027)**
(Casorati, Felice) *See* **Bottazzini, Umberto, (80b:01009)** *and* **Neuenschwander, E., (80c:01006)**
(Hermite, Ch.) *See* **Bottazzini, Umberto, (80b:01009)**
(Littlewood, John Edensor) *See* **Burkill, J. C., (80k:01027)**
Neuenschwander, E. Der Nachlass von Casorati (1835–1890) in Pavia. **(80c:01006)**
Bibliography:
Littlewood, John Edensor *See* **Burkill, J. C., (80k:01027)**
Obituary:
Littlewood, John Edensor *See* **Burkill, J. C., (80k:01027)**

30–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

Homentcovschi, Dorel Numerical quadrature methods of analytic functions. **(80d:65036)**

30–06 Proceedings, conferences, etc.

(Andreian Cazacu, Cabiria) *See* **Romanian-Finnish Seminar on Complex Analysis, 80f:30002**
(Bilì, V. I.) *See* **Metric questions of the theory of functions and mappings, 80j:30003** *and* **Questions in the metric theory of mappings and its application, 80j:30004**
(Cornea, Aurel) *See* **Romanian-Finnish Seminar on Complex Analysis, 80f:30002**
(Dzjadik, V. K.) *See* **Theory of functions and its applications, 80k:30001**
(Jurchescu, Martin) *See* **Romanian-Finnish Seminar on Complex Analysis, 80f:30002**
(Koroljuk, V. S.) *See* **Mathematical analysis and probability theory, 80f:30001**
(Laine, Ilpo) *See* **Complex analysis Joensuu 1978, 80h:30002**
(Lehto, Olli) *See* **Complex analysis Joensuu 1978, 80h:30002**
(Mitropol'skiĭ, Ju. O.) *See* **Theory of functions and its applications, 80k:30001**
(Nevanlinna, Rolf) *See* **Proceedings: Rolf Nevanlinna Symposium on Complex Analysis, 80e:30004**
(Pfluger, Albert) *See* **Contributions to analysis, 80j:30002**
(Sorvali, Tuomas) *See* **Complex analysis Joensuu 1978, 80h:30002**
(Suciu, Ion) *See* **Romanian-Finnish Seminar on Complex Analysis, 80f:30002**
(Suvorov, G. D.) *See* **Metric questions of the theory of functions and mappings, 80j:30003** *and* **Questions in the metric theory of mappings and its application, 80j:30004**
Analysis *See* **Contributions to analysis, 80j:30002**
Bucharest *See* **Romanian-Finnish Seminar on Complex Analysis, 80f:30002**
Colloquium:
Complex Analysis *See* **Complex analysis Joensuu 1978, 80h:30002**

Colloquium: *(continued)*
Quasiconformal Mappings, their Generalizations and Applications *See* **Questions in the metric theory of mappings and its application, 80j:30004**
Complex analysis ★Complex analysis, Joensuu, 1978. **80b:30002**
See also **Proceedings: Rolf Nevanlinna Symposium on Complex Analysis, 80e:30004** *and* **Romanian-Finnish Seminar on Complex Analysis, 80i:30002**
Contributions to analysis ★Contributions to analysis. **80j:30002**
Donetsk *See* **Questions in the metric theory of mappings and its application, 80j:30004**
Extremal problems in function theory ★Extremal problems in function theory. (Japanese) **80e:30002**
Function theory *See* **Extremal problems in function theory, 80e:30002**
Joensuu *See* **Complex analysis Joensuu 1978, 80b:30002**
Kleinian groups and Riemann surfaces ★Kleinian groups and Riemann surfaces. (Japanese) **80e:30003**
Kyoto *See* **Extremal problems in function theory, 80e:30002** *and* **Kleinian groups and Riemann surfaces, 80e:30003**
Mappings *See* **Metric questions of the theory of functions and mappings, 80j:30003**
Mathematical analysis and probability theory ★Математический анализ и теория вероятностей. (Russian) [Mathematical analysis and probability theory] **80i:30001**
Metric questions of the theory of functions and mappings ★Метрические вопросы теории функций и отображений. Вып. VI. (Russian) [Metric questions of the theory of functions and mappings. No. VI] **80j:30003**
Metric theory of mappings *See* **Questions in the metric theory of mappings and its application, 80j:30004**
Probability theory *See* **Mathematical analysis and probability theory, 80i:30001**
Proceedings:
Rolf Nevanlinna Symposium on Complex Analysis ★Proceedings of the Rolf Nevanlinna Symposium on Complex Analysis. **80e:30004**
Quasiconformal mappings *See* **Romanian-Finnish Seminar on Complex Analysis, 80i:30002**
Questions in the metric theory of mappings and its application ★Вопросы метрической теории отображений и ее применение. (Russian) [Questions in the metric theory of mappings and its application] **80j:30004**
Riemann surfaces *See* **Kleinian groups and Riemann surfaces, 80e:30003**
Romanian-Finnish Seminar on Complex Analysis ★Romanian-Finnish Seminar on Complex Analysis. **80i:30002**
Seminar:
Romanian-Finnish, Complex Analysis *See* **Romanian-Finnish Seminar on Complex Analysis, 80i:30002**
Sillvri *See* **Proceedings: Rolf Nevanlinna Symposium on Complex Analysis, 80e:30004**
Symposium:
Rolf Nevanlinna, Complex Analysis *See* **Proceedings: Rolf Nevanlinna Symposium on Complex Analysis, 80e:30004**
Analysis *See* **Contributions to analysis, 80j:30002**
Extremal Problems in Function Theory *See* **Extremal problems in function theory, 80e:30002**
Kleinian Groups and Riemann Surfaces *See* **Kleinian groups and Riemann surfaces, 80e:30003**
Theory of functions *See* **Metric questions of the theory of functions and mappings, 80j:30003**
Theory of functions and its applications ★Теории функций и ее приложения. (Russian) [The theory of functions and its applications] **80k:30001**
Zurich *See* **Contributions to analysis, 80j:30002**

Secondary classifications:

(Sundararaman, D.) *See* **Hyperbolic complex analysis, (80k:32001)**
Complex analysis *See* **Hyperbolic complex analysis, (80k:32001)**
Holomorphic curves *See* **Meromorphic functions and value-distributions of holomorphic curves, (80f:30017)**
Hyperbolic complex analysis ★Hyperbolic complex analysis. **(80k:32001)**
Kyoto *See* **Meromorphic functions and value-distributions of holomorphic curves, (80f:30017)**
Madras *See* **Hyperbolic complex analysis, (80k:32001)**
Meromorphic functions and value-distributions of holomorphic curves ★Value distribution of holomorphic curves and meromorphic functions. (Japanese) **(80f:30017)**
Seminar:
All India, Hyperbolic Complex Analysis *See* **Hyperbolic complex analysis, (80k:32001)**
Symposium:
Meromorphic Functions and Value-Distributions of Holomorphic Curves *See* **Meromorphic functions and value-distributions of holomorphic curves, (80f:30017)**

30Axx General properties

30A05 Monogenic properties of complex functions (including polygenic and areolar monogenic functions)

Berenstein, Carlos Alberto The problem of Pompeiu. (Spanish) **80h:30003**
Morgan, J. D. *See* **Rawlins, A. D., 80b:30002**
Rawlins, A. D. (*with* Morgan, J. D.) Monotonic properties of analytic functions. **80b:30002**
Stel'mašuk, N. T. Some properties of *F*-monogenic functions. (Russian. English summary) **80m:30001**

Secondary classifications:

Roęculeţ, Marcel N. Sur les équations aux dérivées partielles qui expriment les conditions de monogénéité, itérées. **(80d:35036)**

30A10 Inequalities in the complex domain

Al-Amiri, Hassoon S. Certain *n*th order differential inequalities in the complex plane. **80m:30002**
Lai, Wan Cai The exact value of Hayman's constant in Landau's theorem. **80k:30002**
Malonek, H. On the question of validity of theorems of Phragmén-Lindelöf type for solutions of complex differential inequalities. (Russian. Armenian and English summaries) **80k:30003**
Saitoh, Saburou Some inequalities for analytic functions with a finite Dirichlet integral on the unit disc. **80j:30005**

Secondary classifications:

Cusick, T. W. (*with* Kolesnik, G.) Turán's second theorem on sums of powers of complex numbers. **(80i:10061)**
Everitt, W. N. An integral inequality with an application to ordinary differential operators. **(80i:26020)**
Kolesnik, G. *See* **Cusick, T. W., (80i:10061)**

30A99 None of the above, but in this section

Walsh, Bertram More on gradient characterizations of analyticity. **80h:30004**

Secondary classifications:

Trohimčuk, Ju. Ju. Differential properties of real and complex functions. (Russian) **(80i:26016)**

30Bxx Series expansions

30B10 Power series (including lacunary series)

Beyer, W. A. *See* **McCall, J. D.; et al., 80i:30003**
Chang, Sun Yung A. (*with* Hwang, Jun Shung) On curvilinear and fine Abel limit. **80g:30001**
Fricke, G. H. *See* **McCall, J. D.; et al., 80i:30003**
Gopal, K. *See* **Kapoor, G. P., 80k:30004**
Hornich, H. (*with* Umgeher, Karl) Über Reihen- und Produktdarstellung von Funktionen. **80j:30006**
Hwang, Jun Shung *See* **Chang, Sun Yung A., 80g:30001**
Kapoor, G. P. (*with* Gopal, K.) On the coefficients of functions analytic in the unit disc having fast rates of growth. **80k:30004**
McCall, J. D. (*with* Fricke, G. H.; Beyer, W. A.) Remainders of power series. **80i:30003**
Meyer-König, W. (*with* Zeller, Karl) Über die Grössenordnung der Koeffizienten von Potenzreihenentwicklungen. **80b:30003**
Spilker, Jürgen A simple proof of an analogue of Wiener's $1/f$ theorem. **80i:30004**
Stadtmüller, U. On the zeros of power series with logarithmic coefficients. **80i:30005**
Szüsz, P. On singularities of power-series. **80k:30005**
Umgeher, Karl *See* **Hornich, H., 80j:30006**
Zeller, Karl *See* **Meyer-König, W., 80b:30003**

Secondary classifications:

de Bruin, M. G. The interruption phenomenon for generalized continued fractions. **(80e:10012)**
Campbell, Douglas M. (*with* Wickes, Gene H.) The Bloch-Nevanlinna conjecture revisited. **(80b:30028)**
Faulstich, Karin Summierbarkeit von Potenzreihen durch Riesz-Verfahren mit komplexen Erzeugendenfolgen. **(80j:40002)**
Holševnikov, K. V. Certain properties of d'Alembert functions of celestial mechanics. **(80b:70017)**
Wickes, Gene H. *See* **Campbell, Douglas M., (80b:30028)**

30B20 Random power series

30B30 Boundary behavior of power series, over-convergence

Luh, Wolfgang On universal functions. **80m:30003**
(*with* Trautner, R.) On the Hausdorff-overconvergence of power series. **80c:30004**
Selberg, Henrik L. Über das Verhalten einer Potenzreihe am Rande des Konvergenzkreises. **80a:30001**
Trautner, R. *See* **Luh, Wolfgang, 80c:30004**

Secondary classifications:

Faulstich, Karin Summierbarkeit von Potenzreihen durch Riesz-Verfahren mit komplexen Erzeugendenfolgen. **(80j:40002)**
Luh, Wolfgang Universalfunktionen in einfach zusammenhängenden Gebieten. **(80m:30040)**

30B40 Analytic continuation

Chambers, Barbara Fromm Analytic continuation via Hadamard's product. **80f:30002**
Lavrent'ev, M. M. Some problems of analytic continuation. **80i:30006**
Yoshino, Kunio Analytic continuation of arithmetic holomorphic functions on a half-plane. **80h:30005**

Secondary classifications:

Gill, John Enhancing the convergence region of a sequence of bilinear transformations. **(80d:30004)**
Krukal', S. L. Some remarks on the problem of analytic continuation. (Russian) **(80m:30009)**
Shapiro, Harold S. Stefan Bergman's theory of doubly-orthogonal functions. An operator-theoretic approach. **(80m:30010)**
Shoop, Richard A. Some applications of (f, d_n) summability. **(80m:42012)**

30B50 Dirichlet series and other series expansions, exponential series [See also 40–XX, 41–XX, 42–XX.]

Awasthi, K. N. (*with* Dixit, K. K.) On the logarithmic order of analytic functions represented by Dirichlet series. **80b:30004**
Azpeitia, A. G. On the lower linear type of entire functions defined by Dirichlet series. (Italian summary) **80h:30006**
Babaev, H. B. Entire functions that are represented by Dirichlet series. (Russian) **80a:30002**
Bala, Shakti *See* **Gupta, J. S., 80a:30003**
Blambert, Maurice (*with* Parvatham, Rajagopalam) On the lower order of entire functions defined by L-Dirichletian elements. (French summary) **80j:30007**
(*with* Parvatham, Rajagopalam) On the overconvergence of certain series. **80i:30007**
Boyd, David W. Schur's algorithm for bounded holomorphic functions. **80b:30007**
Dixit, K. K. *See* **Awasthi, K. N., 80b:30004**
Gupta, J. S. (*with* Bala, Shakti) K-th mean function of entire functions defined by Dirichlet series. **80a:30003**
See also **Srivastava, R. S. L., 80d:30002**
Gar'janova, K. N. A method of analytic continuation of a function given by a Dirichlet series. (Russian) **80k:30006**
Mel'nik, Ju. I. Representation of regular functions by series of Dirichlet type. (Russian) **80m:30004**
Parvatham, Rajagopalam *See* **Blambert, Maurice, 80i:30007** *and* **Blambert, Maurice, 80j:30007**
Šeremeta, M. M. The Wiman-Valiron method for entire functions that are defined by Dirichlet series. (Russian) **80a:30004**
The Wiman-Valiron method for Dirichlet series. (Russian) **80b:30005**
Application of the Wiman-Valiron method to Dirichlet series. (Russian. English summary) **80k:30007**
Srivastava, Girja S. *See* **Vaish, Satendra K., 80i:30008** *and* **Vaish, Satendra K., 80k:30008**
Srivastava, R. S. L. (*with* Gupta, J. S.) On the growth of integral functions and their derivatives defined by Dirichlet series. **80d:30002**
Vaish, Satendra K. (*with* Srivastava, Girja S.) Logarithmic proximate orders of entire functions represented by Dirichlet series. **80k:30008**
(*with* Srivastava, Girja S.) On the logarithmic proximate orders of entire functions represented by Dirichlet series. (French summary) **80i:30008**
Vinnic'kiĭ, B. V. Representation of functions by the series $\sum_{n=1}^{\infty} d_n f(\lambda_n z)$. (Russian) **80j:30008**
Yu, Jia Rong Sur la croissance et la répartition des valeurs des séries de Dirichlet qui ne convergent que dans un demi-plan. (English summary) **80i:30009**

Secondary classifications:

Boĭčuk, V. S. *See* **Lunc, G. L.; et al., (80m:30024)**
Čulik, Ĭ. Ĭ. *See* **Kardaš, A. Ĭ.; et al., (80c:32001)**
Cvil', M. M. *See* **Kakičev, V. A., (80c:32003)**
Hoischen, Lothar (*with* Mogk, Eberhard) Bestimmung von Konvergenzfaktoren aus asymptotischen Approximationseigenschaften Dirichletscher Reihen. **(80b:40002)**
Jastrauskas, Algimantas Properties of conjugate abscissas of convergence of double Dirichlet series. (Russian. Lithuanian and German summaries) **(80b:32002)**
Kakičev, V. A. (*with* Cvil', M. M.) Approximation of analytic functions of two variables by partial sums of Laurent-Faber series. (Russian) **(80c:32003)**
Kardaš, A. Ĭ. (*with* Kostovs'kiĭ, O. M.; Čulik, Ĭ. Ĭ.) Properties of the Newton diagram and majorant for double Dirichlet series in the problem of the localization of zeros. (Russian. English summary) **(80c:32001)**
Kostovs'kiĭ, O. M. *See* **Kardaš, A. Ĭ.; et al., (80c:32001)**
Krishnaiah, P. V. (*with* Sitaramachandra Rao, R.) On Berndt's method in arithmetical functions and contour integration. **(80b:10008)**
Lunc, G. L. (*with* Rotkova, O. V.; Boĭčuk, V. S.) Singularities and the Riemann surface of a function that is defined by a Dirichlet series, and the indicators of entire functions associated with it. (Russian. Lithuanian and English summaries) **(80m:30024)**
Miao, Lung Chi Fastautomorphe Dirichletfunktionen. **(80i:10033)**
Mogk, Eberhard *See* **Hoischen, Lothar, (80b:40002)**
Rotkova, O. V. *See* **Lunc, G. L.; et al., (80m:30024)**
Šeremeta, M. M. The Wiman-Valiron method for entire functions that are given by Dirichlet series. (Russian) **(80b:30018)**
Analogues of Wiman's theorem for Dirichlet series. (Russian) **(80k:30024)**
Sitaramachandra Rao, R. *See* **Krishnaiah, P. V., (80b:10008)**
Vaish, Satendra K. Logarithmic means of entire functions of slow growth represented by Dirichlet series. (French summary) **(80f:30018)**

30B60 Completeness problems, closure of a system of functions

Ballette, Almée (*with* Siddiqi, Jamil A.) Non-totalité d'exponentielles sur un arc rectifiable. (English summary) **80i:30010**
Kaz'min, Ju. A. The values of M. T. Eweida's constants. (Russian. English summary) **80m:30005**
Oskolkov, V. A. Some bases in spaces of regular functions and their application to interpolation. (Russian) **80a:30005**
Sedleckiĭ, A. M. Bases consisting of exponentials in E^p spaces on convex polygons. (Russian) **80d:30003**
Siddiqi, Jamil A. *See* **Baillette, Almée, 80i:30010**
Sinanjan, S. O. The completeness of polynomials in the space L^p. (Russian) **80i:30011**

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30B70 Continued fractions [See also 10A32, 40A15.]

Gill, John Enhancing the convergence region of a sequence of bilinear transformations. **80d:30004**
Hloponin, S. S. Approximation of functions by continued fractions. (Russian) **80k:30009**
Waadeland, Haakon General T-fractions corresponding to functions satisfying certain boundedness conditions. **80k:30010**
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Datta, K. *See* **Singh, Virendra; et al., (80d:81017)**
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30B99 None of the above, but in this section

Umgeher, Karl Über eine Produktdarstellung holomorpher Funktionen. (Italian summary) **80f:30003**

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Aleksandrov, A. B. Discrete measures with compact nowhere dense support that are orthogonal to rational functions. (Russian. English summary) **(80c:46059)**
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Grinstein, Fernando F. *See* **Garibotti, C. R., (80a:81092)**

30Cxx Geometric function theory

30C10 Polynomials

Jöricke, B. A comparison of the maximum of the modulus of a polynomial with the weighted sum of the moduli of its coefficients. (Russian. English summary) **80b:30006**
Kemperman, J. H. B. (*with* Lorentz, G. G.) Bounds for polynomials with applications. **80f:30004**
Lachance, Michael (*with* Saff, Edward B.; Varga, Richard S.) Inequalities for polynomials with a prescribed zero. **80j:30009**
Lorentz, G. G. *See* **Kemperman, J. H. B., 80f:30004**
Saff, Edward B. *See* **Lachance, Michael; et al., 80j:30009**
Varga, Richard S. *See* **Lachance, Michael; et al., 80j:30009**

Secondary classifications:

Case, K. M. *See* **Geronimo, J. S., (80f:81100)**
Delsarte, Philippe (*with* Genin, Yves V.; Kamp, Yves G.) Schur parametrization of positive definite block-Toeplitz systems. **(80d:15013)**
Genin, Yves V. *See* **Delsarte, Philippe; et al., (80d:15013)**
Geronimo, J. S. (*with* Case, K. M.) Scattering theory and polynomials orthogonal on the unit circle. **(80f:81100)**
Kamp, Yves G. *See* **Delsarte, Philippe; et al., (80d:15013)**
Lawton, Wayne Asymptotic properties of roots of polynomials—preliminary report. **(80i:12003)**
Sinanjan, S. O. The completeness of polynomials in the space L^p. (Russian) **(80i:30011)**

30C15 Zeros of polynomials, rational functions, and other analytic functions (e.g. zeros of functions with bounded Dirichlet integral) {For algebraic theory, see 12D10; for real methods, see 26C10.}

Beraha, Sami (*with* Kahane, Joseph; Weiss, N. J.) Limits of zeros of recursively defined families of polynomials. **80c:30005**
Claessens, Guido On the location of the zeros of a generalized polynomial. **80c:30006**
Datt, Brham (*with* Govil, N. K.) On the location of the zeros of a polynomial. **80g:30002**
Erdős, Paul (*with* Hwang, Jun Shung) On a geometric property of lemniscates. **80c:30007**
Eustice, Dan (*with* Klamkin, Murray S.) On the coefficients of a partial fraction decomposition. **80g:30003**
Flaikow, Aaron The zeros of the odd and even parts of a Hurwitz polynomial. **80m:30006**
Gawronski, Wolfgang A lower bound for the number of negative zeros of power series. **80j:30010**
Govil, N. K. *See* **Datt, Brham, 80g:30002**
Hwang, Jun Shung *See* **Erdős, Paul, 80c:30007**

Jain, V. K. On the location of zeros of polynomials. (Polish and Russian summaries) **80a:30006**
Kahane, Joseph *See* **Beraha, Sami; et al., 80c:30005**
Klamkin, Murray S. *See* **Eustice, Dan, 80g:30003**
Meyer, Gottfried P. Über die Nullstellen von Exponentialsummen längs einer logarithmischen Wechsellinie. **80k:30012**
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Schmidt, Hermann (*with* Meyer, Gottfried P.) Zur Existenz und analytischen Darstellung von Nullstellenfolgen bei Exponentialsummen. **80a:30007**
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Vagarinkjan, A. A. Zeros of some classes of analytic functions. (Russian. Armenian and English summaries) **80l:30012**
Vernon, Siobhán On the critical points of polynomials. **80l:30013**
Weiss, N. J. *See* **Beraha, Sami; et al., 80c:30005**

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Brownawell, W. Dale Travaux récents de Ju. V. Nesterenko. **(80c:10036)**
Deutsch, Emeric On the spread of matrices and polynomials. **(80a:15019)**
Fisher, Michael E. *See* **Kurtze, Douglas A., (80d:82017)**
Giaretta, D. L. (*with* ter Haar, D.) An extension of Hurwitz's criterion. I. Basic theory. **(80l:85001a)**
(*with* ter Haar, D.) An extension of Hurwitz's criterion. II. Application to instabilities in the interstellar medium. **(80l:85001b)**
ter Haar, D. *See* **Giaretta, D. L., (80l:85001a)** *and* **Giaretta, D. L., (80l:85001b)**
Kurtze, Douglas A. (*with* Fisher, Michael E.) The Yang-Lee edge singularity in spherical models. **(80d:82017)**
Lee, Ting N. (*with* Yang, Chung Chun) On a class of continued fractions with entries being complex variable functions: an application to the finite inhomogeneous network synthesis. **(80k:94035)**
(Nesterenko, Ju. V.) *See* **Brownawell, W. Dale, (80c:10036)**
Šamojan, F. A. A factorization theorem of M. M. Džrbašjan and the characteristic of zeros of functions analytic in the circle with a majorant of finite growth. (Russian. Armenian and English summaries) **(80l:30054)**
Stadtmüller, U. On the zeros of power series with logarithmic coefficients. **(80l:30005)**
Yang, Chung Chun *See* **Lee, Ting N., (80k:94035)**
Younis, Rahman Interpolation by a finite Blaschke product. **(80k:30035)**

30C20 Conformal mappings of special domains

Efremovič, V. A. *See* **Vaĭnšteĭn, A. G.; et al., 80f:30005**
Gorelik, E. M. *See* **Vaĭnšteĭn, A. G.; et al., 80f:30005**
Ling, Chih Bing Conformal transformations of three types of edge notches. **80l:30014**
Minda, C. David Conformal automorphisms of circular regions. **80l:30015**
Rodin, Burton (*with* Warschawski, Stefan E.) Estimates for conformal maps of strip domains without boundary regularity. **80k:30013**
Vaĭnšteĭn, A. G. (*with* Gorelik, E. M.; Efremovič, V. A.) Plane domains, equimorphic to a rectilinear semistrip. (Russian) **80f:30005**
Warschawski, Stefan E. *See* **Rodin, Burton, 80k:30013**

Secondary classifications:

Heins, Maurice Structure theorems for conformal maps of regions convex in a given direction. **(80h:30012)**
Homentcovschi, Dorel Conformal mapping of the domain exterior to a thin symmetrical profile. **(80k:76010)**
Conformal mapping of the domain exterior to a thin region. **(80l:76008)**
Simonenko, I. B. Application of the principle of minimization of areas to the approximate estimation of Christoffel-Schwarz constants. (Russian) **(80g:30004)**

30C25 Covering theorems in conformal mapping theory

30C30 Numerical methods in conformal mapping theory [See also 65E05.]

Askerov, È. R. (*with* Zakradze, M. V.) Approximate construction of conformal mapping functions for simply connected domains. (Russian) **80f:30006**
Ellacott, S. W. A technique for approximate conformal mapping. **80b:30007**
On the approximate conformal mapping of multiply connected domains. **80j:30011**
Grassmann, E. Numerical experiments with a method of successive approximation for conformal mapping. (German summary) **80m:30008**
Hopkins, T. R. (*with* Roberts, D. E.) Kufarev's method for determining the Schwarz-Christoffel parameters. **80j:30012**
Levin, D. (*with* Papamichael, N.; Sideridis, A.) The Bergman kernel method for the numerical conformal mapping of simply connected domains. **80h:30008**
Nicolaide, Andrei Conformal transformation using direct minimization methods. **80b:30008**
Opfer, Gerhard New extremal properties for constructing conformal mappings. **80b:30009**
Papamichael, N. *See* **Levin, D.; et al., 80h:30008**
Roberts, D. E. *See* **Hopkins, T. R., 80j:30012**
Sideridis, A. *See* **Levin, D.; et al., 80h:30008**
Simonenko, I. B. Application of the principle of minimization of areas to the approximate estimation of Christoffel-Schwarz constants. (Russian) **80g:30004**
Zakradze, M. V. *See* **Askerov, È. R., 80f:30006**

Secondary classifications:

Hübner, Otto Zur Numerik der Theodorsenschen Integralgleichung in der konformen Abbildung. **(80f:65037)**

Pascu, N. N. (*with* Podaru, V.; Rotaru, P.) Calculation of the alpha-starlike radius for starlike functions of order beta. (Romanian. German summary) **(80j:30022)**
Podaru, V. *See* **Pascu, N. N.; et al., (80j:30022)**
Rotaru, P. *See* **Pascu, N. N.; et al., (80j:30022)**

30C35 General theory of conformal mappings

Brennan, James E. The integrability of the derivative in conformal mapping. **80b:30009**
Černý, Ilja Cuts in simple connected regions and the cyclic ordering of the system of all boundary elements. **80a:30008**
Lehtinen, Matti *See* **Peschl, Ernst, 80h:30010**
Lesley, F. D. On interior and conformal mappings of the disk. **80l:30016**
Miyahara, Yasushi On relations between conformal mappings and isomorphisms of spaces of analytic functions on Riemann surfaces. **80e:30005**
Peschl, Ernst (*with* Lehtinen, Matti) A conformal self-map which fixes three points is the identity. **80h:30010**
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Leschinger, Karl Über Fixpunkte holomorpher Automorphismen. (English summary) **(80e:55005)**
Meyer, Yves *See* **Coifman, Ronald, (80j:42024)**
Mikljukov, V. M. An estimate of the modulus of a family of curves on a minimal surface and its applications. (Russian) **(80k:53010)**
Vlček, Vladimír A note to a certain pair of parametric integrals. (Czech and Russian summaries) **(80m:44008)**

30C40 Kernel functions and applications

Burbea, Jacob Capacities and spans on Riemann surfaces. **80f:30007**
Krulikal', S. L. Some remarks on the problem of analytic continuation. (Russian) **80m:30009**
Saitoh, Saburou The weighted periods of analytic functions and the kernel functions of Szegő type for some closed subspaces. **80f:30008**
The Bergman norm and the Szegő norm. **80h:30011**
Shapiro, Harold S. Stefan Bergman's theory of doubly-orthogonal functions. An operator-theoretic approach. **80m:30010**

Secondary classifications:

Alenicyn, Ju. E. On the theory of quasiconformal mappings. (Russian) **(80m:30016)**
Chaudhri, Muhammad Hayat (*with* Helfenstein, H. G.) Minimizing maps for simply connected domains. **(80m:30021)**
Coifman, Ronald (*with* Rochberg, Richard) Representation theorems for holomorphic and harmonic functions. **(80j:32006)**
Helfenstein, H. G. *See* **Chaudhri, Muhammad Hayat, (80m:30021)**
Rochberg, Richard *See* **Coifman, Ronald, (80j:32006)**
Saitoh, Saburou The Dirichlet norm and the norm of Szegő type. **(80j:30068)**
Sakai, Makoto Analytic functions with finite Dirichlet integrals on Riemann surfaces. **(80d:30042)**

30C45 Special classes of univalent and multivalent functions (star-like, convex, bounded rotation, etc.)

Al-Amiri, Hassoon S. Certain analogy of the α-convex functions. **80l:30017**
Atzmon, Aharon Extremal functions for functionals on some classes of analytic functions. **80c:30008**
Bajpai, Shyam Kishore Influence of $\frac{1}{2}f''(0)$ on the α-convexity of normalised starlike univalent analytic functions of order β. **80j:30013**
Barnard, Roger W. On Robinson's $\frac{1}{2}$ conjecture. **80j:30014**
A generalization of Study's theorem on convex maps. **80k:30014**
Bharati, R. Some radius of convexity problems. **80a:30009**
Campbell, Douglas M. (*with* Pearce, Kent) Generalized Bazilevič functions. **80d:30005**
Černikov, V. V. *See* **Sižuk, P. I., 80g:30010**
Chand, Rattan (*with* Singh, Prem) On certain schlicht mappings. **80j:30015**
Ciozda, Krystyna Sur la classe des fonctions convexes vers l'axe réel négatif. (English and Russian summaries) **80m:30011**
Das, R. N. (*with* Singh, Prem) Radius of convexity for a certain subclass of close to convex functions. **80a:30010**
Fait, Maria (*with* Złotkiewicz, Eligiusz) Convex hulls of some classes of univalent functions. (Polish and Russian summaries) **80c:30009**
Fekete, Otto On some subclasses of Bazilevič functions. **80k:30015**
Fukui, Seiichi On the radii of convexity and starlikeness of $(zf(z))'/2$. **80k:30016**
Goodman, A. W. Koebe domains for certain families. **80d:30006**
(*with* Saff, Edward B.) On univalent functions convex in one direction. **80e:30006**
Hamilton, D. H. (*with* Tuan, P. D.) An extremal problem for functions of positive real part with application to a radius of convexity problem. **80e:30007**
Heins, Maurice Structure theorems for conformal maps of regions convex in a given direction. **80h:30012**
Hou, Ming Shu α-starlike functions. (Chinese) **80g:30006**
Jakubenko, O. A. *See* **Zmorovič, V. A., 80l:30029**
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Juneja, Om Prakash (*with* Mogra, M. L.) Radii of convexity for certain classes of univalent analytic functions. **80a:30011**
(*with* Mogra, M. L.) On starlike functions of order α and type β. **80c:30010**
Kaĭdan, V. O. (*with* Pohilevič, V. O.) Some properties of arcs of level curves outside the

circle of the radius of convexity. (Russian) **80m:30012**

Kamiński, Józef *See* **Jakubowski, Zbigniew J., 80i:30018**

Kirjackis, E. Some properties of functions with nonzero divided difference. (Russian. Lithuanian and English summaries) **80j:30016**

Kocur, M. F. Curvature bounds and the radius of convexity of the image of the circle $|z|=r$, $0<r<1$, in the class $Q(\alpha)$. (Ukrainian. English and Russian summaries) **80g:30007**

Korobkova, İ. K. *See* **Zmorovič, V. A., 80a:30014**

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Kumbi, V. K. A note on starlike function. **80h:30013**

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Leach, Ronald J. Strongly starlike functions of higher order. (Polish and Russian summaries) **80c:30011**

Leung, Y. J. Integral means of the derivatives of some univalent functions. **80m:30013**

Robertson's conjecture on the coefficients of close-to-convex functions. **80i:30019**

Liu, Li Quan The rotation theorem for meromorphic starlike functions. (Chinese. English summary) **80j:30017**

Majchrzak, Wiesław An extremal arclength problem in some classes of univalent and p-symmetric functions. **80j:30018**

Makówka, Bogusław Convex functions of order-α and type-β. (Polish and Russian summaries) **80j:30019**

Miller, Sanford S. (*with* Mocanu, Petru T.) Second-order differential inequalities in the complex plane. **80f:30009**

(*with* Mocanu, Petru T.; Reade, Maxwell O.) Starlike integral operators. **80g:30008**

Mocanu, Petru T. *See* **Miller, Sanford S., 80f:30009** *and* **Miller, Sanford S.; et al., 80g:30008**

Mogra, M. L. On a class of functions with positive real part. **80i:30020**

See also **Juneja, Om Prakash, 80a:30011** *and* **Juneja, Om Prakash, 80c:30010**

Pachulski, Zygmunt On the radius of convexity for certain family of functions meromorphic in unit disc. **80h:30014**

Pascu, N. N. α-starlike functions. (Romanian. English summary) **80j:30020**

(*with* Podaru, V.; Rotaru, P.) Calculation of the alpha-starlike radius for starlike functions of order beta. (Romanian. German summary) **80j:30022**

Alpha-close-to-convex functions. **80j:30021**

Patil, D. A. (*with* Thakare, W. K.) Radii of convexity of certain classes of p-valent analytic functions. **80i:30021**

(*with* Thakare, Nimbakrishna) On coefficient bounds of p-valent λ-spiral functions of order α. **80k:30017**

Pearce, Kent *See* **Campbell, Douglas M., 80d:30005**

Podaru, V. *See* **Pascu, N. N.; et al., 80j:30022**

Pohilevič, V. O. *See* **Kaĭdan, V. O., 80m:30012**

Proborov, D. V. Integrals of univalent functions. (Russian) **80h:30015**

Reade, Maxwell O. *See* **Miller, Sanford S.; et al., 80g:30008**

Robertson, M. S. A characterization of the class of starlike univalent functions. **80f:30010**

Rotaru, P. *See* **Pascu, N. N.; et al., 80j:30022**

Ruscheweyh, Stephan Some convexity and convolution theorems for analytic functions. **80i:30023**

(*with* Singh, Vikramaditya) On a Briot-Bouquet equation related to univalent functions. **80i:30022**

Saff, Edward B. *See* **Goodman, A. W., 80e:30006**

Silverman, Herb (*with* Silvia, Evelyn Marie; Telage, Donald) Convolution conditions for convexity starlikeness and spiral-likeness. **80i:30025**

(*with* Silvia, Evelyn Marie; Telage, Donald) Locally univalent functions and coefficient distortions. **80a:30013**

Subclasses of starlike functions. **80g:30009**

(*with* Silvia, Evelyn Marie) Prestarlike functions with negative coefficients. **80i:30024**

(*with* Telage, Donald) Extreme points of subclasses of close-to-convex functions. **80c:30012**

Silvia, Evelyn Marie A note on special classes of p-valent functions. **80c:30013**

See also **Silverman, Herb; et al., 80a:30013**; **Silverman, Herb, 80i:30024** *and* **Silverman, Herb; et al., 80i:30025**

Singh, D. B. On the radius of univalence of some functions analytic in the unit disc. **80f:30011**

Singh, Prem *See* **Das, R. N., 80a:30010** *and* **Chand, Rattan, 80j:30015**

Singh, Ram *See* **Singh, Vikramaditya, 80h:30016**

Singh, Vikramaditya (*with* Singh, Ram) The radii of starlikeness of certain classes of close-to-convex functions. **80h:30016**

Univalent functions with bounded derivative in the unit disc. **80k:30018**

Bounds on the curvature of level lines under certain classes of univalent and locally univalent mappings. **80c:30014**

See also **Ruscheweyh, Stephan, 80i:30022**

Sižuk, P. I. (*with* Černikov, V. V.) The coefficients of α-convex functions of order β. (Russian) **80g:30010**

Sohi, Nirmal Singh A class of p-valent analytic functions. **80i:30026**

Starkov, V. V. Certain properties of functions of the Bazilevič class. (Russian. English summary) **80d:30008**

A variational formula in the class of Bazilevič functions. (Russian. English summary) **80d:30009**

Swamy, S. R. *See* **Kulkarni, V. N., 80d:30007**

Szynal, Anna (*with* Szynal, Jan) On some problems concerning subordination and majorization of functions. **80j:30023**

Szynal, Jan *See* **Szynal, Anna, 80j:30023**

Telage, Donald *See* **Silverman, Herb; et al., 80a:30013**; **Silverman, Herb, 80c:30012** *and* **Silverman, Herb; et al., 80i:30025**

Thakare, Nimbakrishna *See* **Patil, D. A., 80k:30017**

Thakare, W. K. *See* **Patil, D. A., 80i:30021**

Tuan, P. D. *See* **Hamilton, D. H., 80e:30007**

Umarani, Prakash G. On a subclass of spiral-like functions. **80i:30027**

Yoshikai, Toshiaki *See* **Yoshikawa, Hirosaku, 80i:30028**

Yoshikawa, Hirosaku (*with* Yoshikai, Toshiaki) Some notes on Bazilevič functions. **80i:30028**

Złotkiewicz, Eligiusz *See* **Fait, Maria, 80c:30009**

Zmorovič, V. A. (*with* Korobkova, İ. K.) The order of starlikeness of certain subclasses of α-convex functions for $\alpha > 0$. (Russian) **80a:30014**

(*with* Jakubenko, O. A.) The boundary of α-convexity of order γ of class $S^*(m)$. (Russian. English summary) **80i:30029**

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Dobrowolska, Krystyna (*with* Dziubiński, Izydor) On starlike and convex functions of many variables. **(80a:32005)**

Dziubiński, Izydor *See* **Dobrowolska, Krystyna, (80a:32005)**

30C50 Coefficient problems for univalent and multivalent functions

Babin, O. K. Coefficients of univalent functions. (Russian) **80c:30015**

Bishouty, Daoud (*with* Hengartner, Walter) Asymptotic FitzGerald inequalities. **80b:30010**

Duren, P. L. Successive coefficients of univalent functions. **80i:30030**

Haario, Heikki On coefficient bodies of univalent functions. **80b:30011**

Hengartner, Walter *See* **Bishouty, Daoud, 80b:30010**

Miśta, Krystyna Sur les inégalités bilinéaires de Grunsky pour les couples de fonctions qui n'empiètent pas l'une sur l'autre. I. **80i:30031**

Tammi, Olli On optimized inequalities in connection with coefficient bodies of bounded univalent functions. **80f:30012**

Zielińska, Alicja (*with* Zyskowska, Krystyna) On estimation of the eighth coefficient of bounded univalent functions with real coefficients. **80i:30032**

Zyskowska, Krystyna *See* **Zielińska, Alicja, 80i:30032**

Secondary classifications:

Leach, Ronald J. Strongly starlike functions of higher order. (Polish and Russian summaries) **(80c:30011)**

30C55 General theory of univalent and multivalent functions

Ahmad, Iqbal *See* **Gupta, Ved Prakash, 80c:30016**

Bernardi, S. D. ★Bibliography of schlicht functions. Part II. 1966–1975. **80h:30017**

Blatter, Christian Ein Verzerrungssatz für schlichte Funktionen. **80d:30010**

Brannan, D. A. (*with* Kirwan, W. E.) Some covering theorems for analytic functions. **80d:30011**

Brown, Johnny E. Geometric properties of a class of support points of univalent functions. **80k:30019**

Chichra, Pran Nath *See* **Singh, Vikramaditya, 80j:30024**

Fan, Ky Distortion of univalent functions. **80a:30015**

Gehring, Frederick W. Remarks on the universal Teichmüller space. **80d:30012**

González, M. O. On the one-to-oneness of mappings defined by a class of functions of a complex variable. **80g:30011**

Goodman, A. W. An invitation to the study of univalent and multivalent functions. **80f:30013**

Gupta, Ved Prakash (*with* Ahmad, Iqbal) Certain classes of functions univalent in the unit disc. II. **80c:30016**

Kirwan, W. E. (*with* Pell, R. W.) A note on a class of slit conformal mappings. **80d:30013**

See also **Brannan, D. A., 80d:30011**

Nehari, Zeev Univalence criteria depending on the Schwarzian derivative. **80i:30033**

Netanyahu, E. (*with* Schiffer, M.) On the monotonicity of some functionals in the family of univalent functions. **80m:30014**

Pell, R. W. *See* **Kirwan, W. E., 80d:30013**

Schiffer, M. *See* **Netanyahu, E., 80m:30014**

Singh, Vikramaditya (*with* Chichra, Pran Nath) An extension of Becker's criterion of univalence. **80j:30024**

Srivastava, Jagvind Kumar Semigroups of classes of univalent functions. **80g:30012**

Szynal, Jan (*with* Waniurski, Józef) Some problems for linearly invariant families. (Polish and Russian summaries) **80c:30017**

Waniurski, Józef *See* **Szynal, Jan, 80c:30017**

Yamashita, Shinji Conformality and semiconformality of a function holomorphic in the disk. **80h:30018**

On a theorem of Duren, Shapiro and Shields. **80b:30012**

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Secondary classifications:

Širokova, E. A. Some questions on the univalence of solutions of inverse boundary value problems. (Russian) **(80h:30039)**

Walczak, Stanisław Investigations of conditional extrema in the class of Hardy functions and in the family of univalent functions. II. (Polish summary) **(80f:30026b)**

30C60 Quasiconformal mappings

Ahlfors, Lars V. A singular integral equation connected with quasiconformal mappings in space. **80c:30018**

Ahmedov, S. A. Existence of a quasilinear quasiconformal mapping onto a circular domain. (Russian. Uzbek summary) **80a:30016**

On the question of the uniqueness of a linear quasiconformal mapping onto a domain with a Ljapunov boundary. (Russian. Uzbek summary) **80m:30015**

(Suvorov, G. D.) *See* **Questions in the metric theory of mappings and its application, (80j:30004)**
Tamrazov, P. M. *See* **Billi, V. İ., (80b:30029)**
Tetenov, A. V. *See* **Apanasov, B. N., (80e:30023)**
Zelinskiĭ, Ju. B. Application of a local degree to the study of quasi-interior mappings. (Russian) **(80b:58011)**
Colloquium:
Quasiconformal Mappings, their Generalizations and Applications *See* **Questions in the metric theory of mappings and its application, (80j:30004)**
Donetsk *See* **Questions in the metric theory of mappings and its application, (80j:30004)**
Metric theory of mappings *See* **Questions in the metric theory of mappings and its application, (80j:30004)**
Questions in the metric theory of mappings and its application ★Вопросы метрической теории отображений и ее применение. (Russian) [Questions in the metric theory of mappings and its application] **(80j:30004)**

30C70 Extremal problems for conformal and quasiconformal mappings, variational methods

Chaudhri, Muhammad Hayat (*with* Helfenstein, H. G.) Minimizing maps for simply connected domains. **80m:30021**
Helfenstein, H. G. *See* **Chaudhri, Muhammad Hayat, 80m:30021**
Hummel, J. A. The b_1, b_2 coefficient body for Bieberbach-Eilenberg functions. **80g:30014**
Kühnau, Reiner Einige Verzerrungsaussagen bei quasikonformen Abbildungen endlich vielfach zusammenhängender Gebiete. **80b:30015**
Renelt, Heinrich Über Extremalprobleme für schlichte Lösungen elliptischer Differentialgleichungssysteme. **80d:30017**
Über einige Extremalprobleme der konformen Abbildung. **80j:30028**
Yamada, Akira On a lemma of Schiffer. (Japanese) **80b:30016**

Secondary classifications:

Acker, Andrew Some free boundary optimization problems and their solutions. **(80m:35078)**
Aleksandrov, I. A. (*with* Andreev, V. A.) Extremal problems for systems of functions without common values. (Russian) **(80d:30018)**
Andreev, V. A. *See* **Aleksandrov, I. A., (80d:30018)**
Guerrero, Ignacio Quasiconformal variation of the Green's function. **(80i:30063)**
Liu, Li Quan The rotation theorem for meromorphic starlike functions. (Chinese. English summary) **(80j:30017)**
Opfer, Gerhard New extremal properties for constructing conformal mappings. **(80h:30009)**
Starkov, V. V. Certain properties of functions of the Bazilevič class. (Russian. English summary) **(80d:30008)**
A variational formula in the class of Bazilevič functions. (Russian. English summary) **(80d:30009)**
Tammi, Olli On optimized inequalities in connection with coefficient bodies of bounded univalent functions. **(80f:30012)**
Extremal problems in function theory ★Extremal problems in function theory. (Japanese) **(80e:30002)**
Function theory *See* **Extremal problems in function theory, (80e:30002)**
Kyoto *See* **Extremal problems in function theory, (80e:30002)**
Symposium:
Extremal Problems in Function Theory *See* **Extremal problems in function theory, (80e:30002)**

30C75 Extremal problems for conformal and quasiconformal mappings, other methods

Aleksandrov, I. A. (*with* Andreev, V. A.) Extremal problems for systems of functions without common values. (Russian) **80d:30018**
Alenicyn, Ju. E. Extremal properties of mappings on a surface with parallel slits. (Russian) **80a:30019**
Andreev, V. A. *See* **Aleksandrov, I. A., 80d:30018**
Beardon, A. F. (*with* Pommerenke, Ch.) The Poincaré metric of plane domains. **80a:30020**
Jondro, Halina Variations of Faber polynomials and their applications to extremal problems in the family of bounded univalent functions. (Polish. Russian and English summaries) **80b:30020**
Lomzina, T. B. Values for deviations of integral curves. (Russian) **80m:30022**
Owa, Shigeyoshi On the univalent functions with a quasiconformal extension. **80b:30017**
Pommerenke, Ch. *See* **Beardon, A. F., 80a:30020**
Sekigawa, Hisao Schwarzian derivatives of some conformal mappings. **80j:30029**

Secondary classifications:

Burbea, Jacob Capacities and spans on Riemann surfaces. **(80f:30007)**
Leung, Y. J. Integral means of the derivatives of some univalent functions. **(80m:30013)**
Walczak, Stanisław Investigations of conditional extrema in the class of Hardy functions and in the family of univalent functions. I. (Polish summary) **(80f:30026a)**
Investigations of conditional extrema in the class of Hardy functions and in the family of univalent functions. II. (Polish summary) **(80f:30026b)**

30C80 Maximum principle; Schwarz' lemma, Lindelöf principle, analogues and generalizations; subordination

Secondary classifications:

Agranovskiĭ, M. L. Fourier transformation on $SL_2(\mathbf{R})$ and Morera-type theorems. (Russian) **(80j:22014)**
Alenicyn, Ju. E. On the theory of quasiconformal mappings. (Russian) **80m:30016**
Andreian Cazacu, Cabiria Some problems in quasiconformality. **80m:30017**
Belna, Charles (*with* Ortel, Marvin) Extremal quasiconformal mappings: necessary conditions. **80c:30019**
(Bers, Lipman) *See* **Kruškal', S. L., 80j:30025**
Billi, V. İ. (*with* Tamrazov, P. M.) Moduli of smoothness and polynomial approximations of functions in quasi-conformal domains. (Russian) **80d:30014**
See also **Metric questions of the theory of functions and mappings, 80c:30023**
Bojarski, B. Nonlinear overdetermined systems of equations and infinitesimal deformations of quasiconformal mappings. (Russian) **80i:30034**
Gauld, David B. (*with* Vamanamurthy, M. K.) Quasiconformal extensions of mappings in n-space. **80a:30017**
Gehring, Frederick W. Some problems in complex analysis. **80b:30013**
Ghiţa, Dorin Associated measures and the quasiconformality. **80m:30018**
The behaviour of some metrics on Riemann surfaces in respect with quasiconformal mappings. **80k:30020**
Ivanov, O. V. Characteristic property of mappings of the class $BL^{n/2}$. (Russian) **80m:30019**
Ivaşcu, Dumitru Remarks on a class of quasisymmetric transformations. **80k:30021**
Karakbaev, U. S. Boundary correspondence under quasiconformal mapping. (Russian) **80f:30014**
(Kra, Irwin) *See* **Kruškal', S. L., 80j:30025**
Kruškal', S. L. ★Quasiconformal mappings and Riemann surfaces. **80j:30025**
Kühnau, Reiner Schlichte konforme Abbildungen auf nichtüberlappende Gebiete mit gemeinsamer quasikonformer Fortsetzung. **80i:30035**
Zur Verallgemeinerung der Extremaleigenschaft der Parallelschlitzabbildung für quasikonforme Abbildungen. **80i:30036**
Lehtinen, Matti Quasisymmetric functions with dilatation one. **80a:30018**
Lehto, Olli Univalent functions, Schwarzian derivatives and quasiconformal mappings. **80c:30020**
Miniowitz, Ruth Distortion theorems for quasiregular mappings. **80j:30026**
Mirianašvili, M. G. *See* **Samsonija, Z. V., 80b:30014**
Näkki, Raimo (*with* Palka, Bruce) Boundary regularity and the uniform convergence of quasiconformal mappings. **80j:30027**
Obolenskiĭ, A. Ju. Differentiability of quasiconformal mappings with Lipschitz characteristics. (Russian) **80c:30021**
Okabe, Katsuyuki On some open problems in the theory of quasiconformal mappings. I. The L^p-integrability of the partial derivatives of a quasiconformal mapping. **80c:30022**
Ortel, Marvin *See* **Belna, Charles, 80c:30019**
Palka, Bruce *See* **Näkki, Raimo, 80j:30027**
Porru, Giovanni θ-mappings and quasiconformal mappings in normed spaces. **80e:30008**
Samsonija, Z. V. (*with* Mirianašvili, M. G.) The quasiconformal mapping of a simply connected domain onto a plane with a straight-line cut. (Russian) **80b:30014**
Ščepetev, V. A. The area theorem for a class of quasiconformal mappings. (Russian. English summary) **80m:30020**
Šeretov, V. G. On the theory of extremal quasiconformal mappings. (Russian) **80d:30015**
Strugov, Ju. F. A differential property of an extremal mapping that is quasiconformal in the mean. (Russian) **80f:30015**
The compactness of families of mappings, quasiconformal in the mean. (Russian) **80g:30013**
(Suvorov, G. D.) *See* **Metric questions of the theory of functions and mappings, 80c:30023**
Tamrazov, P. M. *See* **Billi, V. İ., 80d:30014**
Vamanamurthy, M. K. *See* **Gauld, David B., 80a:30017**
Vasil'čik, M. Ju. Errata: "The lower bound of the distortion coefficient for infinitely close domains" [Sibirsk. Mat. Ž. **19** (1978), no. 3, 547–554; MR 58#17084]. (Russian) **80h:30019**
Žuravlev, I. V. Some sufficient conditions of quasiconformal continuability of analytic functions. (Russian) **80d:30016**
Colloquium:
Quasiconformal Mappings and their Generalizations *See* **Metric questions of the theory of functions and mappings, 80c:30023**
Donetsk *See* **Metric questions of the theory of functions and mappings, 80c:30023**
Mappings *See* **Metric questions of the theory of functions and mappings, 80c:30023**
Metric questions of the theory of functions and mappings ★Метрические вопросы теории функций и отображений. Вып. VII. (Russian) [Metric questions of the theory of functions and mappings. No. VII] **80c:30023**
Theory of functions *See* **Metric questions of the theory of functions and mappings, 80c:30023**

Secondary classifications:

Apanasov, B. N. (*with* Tetenov, A. V.) The existence of nontrival quasiconformal deformations of Kleinian groups in space. (Russian) **(80e:30023)**
Entire automorphic forms in $\mathbf{R}^n$. (Russian) **(80e:30024)**
Billi, V. İ. (*with* Tamrazov, P. M.) Moduli of smoothness and polynomial approximations of functions in quasiconformal domains. (Russian) **(80b:30029)**
See also **Questions in the metric theory of mappings and its application, (80j:30004)**
Bojarski, B. (*with* Iwaniec, Tadeusz) Topics in quasiconformal theory in several variables. **(80i:35054)**
Harvey, William James Kleinian groups (a survey). **(80h:30042)**
Iwaniec, Tadeusz *See* **Bojarski, B., (80i:35054)**
Kimel'fel'd, B. N. Quasihomogeneous domains on a conformal sphere. (Russian) **(80c:32034)**
Reich, Edgar Uniqueness of Hahn-Banach extensions from certain spaces of analytic functions. **(80j:30074)**
Reshetnjak, Ju. G. Differential properties of quasiconformal mappings and conformal mappings of Riemannian spaces. (Russian) **(80j:53023)**

Szynal, Anna (*with* Szynal, Jan) On some problems concerning subordination and majorization of functions. **(80j:30023)**
Szynal, Jan *See* Szynal, Anna, **(80j:30023)**

30C85 Capacity and harmonic measure in the complex plane [See also 31A15.]

Král, Josef Analytic capacity. **80i:30037**
Stegbuchner, Hans On the metric entropy of some classes of holomorphic functions. (Italian summary) **80e:30009**

Secondary classifications:

Burbea, Jacob Capacities and spans on Riemann surfaces. **(80f:30007)**
Górski, Jerzy Some properties of the equilibrium mass distribution on a compact set in the plane. (Polish summary) **(80a:31002)**
Krasičkov-Ternovskiĭ, I. F. A geometric lemma useful in the theory of entire functions and theorems of Levinson type. (Russian) **(80g:30017)**
Matsuda, Minoru Inequalities for Green functions and logarithmic capacities. **(80k:31002)**
Stegenga, David A. A geometric condition which implies BMOA. **(80h:30033)**

30C99 None of the above, but in this section

Ahlfors, Lars V. A singular operator in hyperbolic space. (Russian summary) **80i:30038**
Hille, Einar Hypergeometric functions and conformal mapping. **80j:30030**
Kostova, M. Some properties of λ-sequences. (Bulgarian. Russian and English summaries) **80f:30016**

Secondary classifications:

Hasumi, Morisuke Hardy classes on plane domains. **(80d:30034)**
Konovalova, T. R. Geometric properties of generalized trigonometric functions. (Russian) **(80b:42013)**
Schwaiger, Jens Eine Formel von E. Jabotinsky in der Theorie der analytischen Iterationen. **(80g:32002)**
Williams, Richard K. How analytic functions preserve closeness. **(80b:54052)**

30Dxx Entire and meromorphic functions, and related topics

Holomorphic curves *See* Meromorphic functions and value-distributions of holomorphic curves, **80f:30017**
Kyoto *See* Meromorphic functions and value-distributions of holomorphic curves, **80f:30017**
Meromorphic functions and value-distributions of holomorphic curves ★Value distribution of holomorphic curves and meromorphic functions. (Japanese) **80f:30017**
Symposium:
Meromorphic Functions and Value-Distributions of Holomorphic Curves *See* Meromorphic functions and value-distributions of holomorphic curves, **80f:30017**

30D05 Functional equations in the complex domain, iteration and composition of analytic functions [See also 34A20, 39–XX.]

Baker, I. N. (*with* Liverpool, L. S. O.) The value distribution of entire functions of order at most one. **80i:30039**
Haruki, Hiroshi On a generalization of Hille's functional equation. **80i:30040**
Lewy, Hans Expansion of solutions of t' Hooft's equation. A study in the confluence of analytic boundary conditions. **80g:30015**
Liverpool, L. S. O. *See* Baker, I. N., **80i:30039**
Pelling, M. J. On the singularity set of complex functions satisfying the Cauchy-Riemann equations. **80i:30041**
Yanagihara, Niro Meromorphic solutions of the difference equation $y(x+1)=y(x)+1+\lambda/y(x)$. I. **80a:30021**

Secondary classifications:

Ger, Joanna On analytic solutions of the functional equation $\varphi(f(x))=g(x,\varphi(x))$. (Polish summary) **(80d:39003)**
Ramakrishnan, Alladi On the matrix functional equation $\alpha(\lambda z)=\beta(z)\cdot\alpha(z)$. **(80h:39014)**
Smyth, W. F. Constant limit of a sequence of iterates. **(80d:30031)**

30D10 Representations of entire functions by series and integrals

Akopjan, S. A. *See* Avetisjan, A. E.; et al., **80m:30023**
Avetisjan, A. E. (*with* Akopjan, S. A.; Hačatrjan, I. O.) The closure of Mittag-Leffler type systems of functions on an arbitrary finite system of rays. (Russian. Armenian and English summaries) **80m:30023**
Boĭčuk, V. S. *See* Lunc, G. L.; et al., **80m:30024**
Hačatrjan, I. O. *See* Avetisjan, A. E.; et al., **80m:30023**
Kondratjuk, A. A. The Fourier series method for entire and meromorphic functions of completely regular growth. (Russian) **80c:30024**
Lunc, G. L. (*with* Rotkova, O. V.; Boĭčuk, V. S.) Singularities and the Riemann surface of a function that is defined by a Dirichlet series, and the indicators of entire functions associated with it. (Russian. Lithuanian and English summaries) **80m:30024**
Rotkova, O. V. *See* Lunc, G. L.; et al., **80m:30024**
Šeremeta, M. M. The Wiman-Valiron method for entire functions that are given by Dirichlet series. (Russian) **80b:30018**
Vaish, Satendra K. Logarithmic means of entire functions of slow growth represented by Dirichlet series. (French summary) **80f:30018**

Secondary classifications:

Gupta, J. S. *See* Srivastava, R. S. L., **(80d:30002)**
Mel'nik, Ju. I. Representation of regular functions by series of Dirichlet type. (Russian) **(80m:30004)**
Sova, Miroslav The Laplace transform of analytic vector-valued functions (complex conditions). (Czech summary) **(80k:44002)**
Srivastava, R. S. L. (*with* Gupta, J. S.) On the growth of integral functions and their derivatives defined by Dirichlet series. **(80d:30002)**

30D15 Special classes of entire functions and growth estimates

Agarwal, S. K. (*with* Bose, S. K.) Properties of a class of integral functions. **80j:30031**
Bose, S. K. *See* Agarwal, S. K., **80j:30031**
Doherey, Ram Prakash *See* Nandan, Krishna; et al., **80h:30023**
Fenton, P. C. Wiman-Valiron theory for entire functions of finite lower growth. **80i:30042**
Frolov, Ju. N. *See* Leont'ev, A. F., **80d:30019**
(Gel'fer, S. A.) *See* Ibragimov, I. I.; et al., **80f:30019**
Genčev, T. G. Inequalities for asymmetric entire functions of exponential type. (Russian) **80b:30019**
Hayman, W. K. How quickly can an entire function tend to zero along a curve? **80a:30022**
Heath, L. F. Vector-valued entire functions of bounded index satisfying a differential equation. **80a:30023**
Hennekemper, Wilhelm Some results of functions of bounded index. **80j:30032**
Ibragimov, I. I. (*with* Nasibov, F. G.) Letter to the editors concerning the work of S. A. Kas'janjuk: "Extremal problems in a subclass of the entire functions of finite order" (Mat. Zametki **19** (1976), no. 1, 19–28). (Russian) **80f:30019**
Juneja, Om Prakash (*with* Srivastava, P. D.) On the space of entire functions of (p,q) order ρ. **80b:30020**
(Kas'janjuk, S. A.) *See* Ibragimov, I. I.; et al., **80f:30019**
Kaz'min, Ju. A. Nontrivial solutions of the homogeneous Abel problem. (Russian) **80k:30022**
Kobayashi, Tadashi An entire function with linearly distributed values. **80j:30033**
Krutin', V. I. The values of positive deviations and values of defects of entire curves of finite lower order. (Russian) **80a:30024**
Lapenko, Ju. P. Estimation of the sum of the defects of entire functions with completely regular growth. (Russian) **80b:30021**
Leont'ev, A. F. (*with* Frolov, Ju. N.) Conditions for the representability of entire functions by certain general series. (Russian) **80d:30019**
Nandan, Krishna (*with* Doherey, Ram Prakash; Srivastava, R. S. L.) Proximate order of an entire function with index pair (p,q). **80k:30023**
Nasibov, F. G. *See* Ibragimov, I. I., **80f:30019**
Ozawa, Mitsuru On the existence of prime periodic entire functions. **80b:30022**
Šeremeta, M. M. Analogues of Wiman's theorem for Dirichlet series. (Russian) **80k:30024**
Shankar, H. The maximum term and maximum modulus of an analytic function. (Serbo-Croatian summary) **80h:30021**
Shea, Daniel F. (*with* Wainger, Stephen) Growth problems for a class of entire functions via singular integral estimates. **80j:30034**
Singh, S. K. On the maximum modulus and the maximum term of an entire function. **80i:30043**
Sreenivasulu, V. Some classes of entire functions. **80a:30025**
Srivastava, P. D. *See* Juneja, Om Prakash, **80b:30020**
Srivastava, R. S. L. *See* Nandan, Krishna; et al., **80k:30023**
Tang, Hslung The index of an entire function related to a Bessel function. **80a:30026**
Urabe, Hironobu Infinite order, periodic, entire functions which together with their derivatives are prime. **80j:30035**
Vaish, Satendra K. Geometric means of an entire function of order zero. **80a:30027**
Wainger, Stephen *See* Shea, Daniel F., **80j:30034**

Secondary classifications:

Baker, I. N. (*with* Liverpool, L. S. O.) The value distribution of entire functions of order at most one. **(80i:30039)**
Epifanov, O. V. Preservation by the operator of convolution of the not entirely regular growth of functions. (Russian) **(80f:47024)**
Fuller, Leonard E. Vectors whose elements belong to a generalized Fibonacci sequence. **(80c:10014)**
Gervais, R. (*with* Rahman, Q. I.; Schmeisser, G.) Simultaneous interpolation and approximation by entire functions of exponential type. **(80c:65038)**
Gramain, François Fonctions entières arithmétiques. **(80k:10068)**
Knab, Otto Über Wachstumsordnung und Typus der Lösungen linearer Differentialgleichungen mit rationalen Koeffizienten. **(80b:34004)**
Zur Werteverteilung der Lösungen linearer Differentialgleichungen. **(80m:34004)**
Koosis, Paul Harmonic estimation in certain slit regions and a theorem of Beurling and Malliavin. **(80d:31007)**
Langmaack, Klaus Eine endliche Formel für die Anzahl der Teiler von n. (English summary) **(80g:10044)**
Liverpool, L. S. O. *See* Baker, I. N., **(80i:30039)**
Rahman, Q. I. *See* Gervais, R.; et al., **(80c:65038)**
Schmeisser, G. *See* Gervais, R.; et al., **(80c:65038)**
Šeremeta, M. M. The Wiman-Valiron method for Dirichlet series. (Russian) **(80b:30005)**
Shah, S. H. Approximation of meromorphic functions by rational functions. **(80e:30016)**
Shah, Swarupchand M. Chebyshev approximation constants related to entire functions of perfectly regular growth. **(80f:30031)**
Srivastava, Girja S. *See* Vaish, Satendra K., **(80k:30008)**
Vaish, Satendra K. (*with* Srivastava, Girja S.) Logarithmic proximate orders of entire functions represented by Dirichlet series. **(80k:30008)**
Zhang, Guang Hou The length of an asymptotic path of an entire function. **(80m:30037)**

30D20 Entire functions, general theory

Ablan, Alexander A property of entire transcendental functions. (Czech summary) **80d:30020**

Bajpai, Shyam Kishore The coefficients of power series giving a coefficient characterization for type. **80g:30016**

Berg, John R. *See* **Singh, S. K., 80m:30027**

Fricke, G. H. (*with* Shah, Swarupchand M.) On bounded value distribution and bounded index. **80c:30025**

Gervais, R. (*with* Rahman, Q. I.) An extension of Carlson's theorem for entire functions of exponential type. II. **80h:30022**

Hayman, W. K. (*with* Vincze, I.) A problem on entire functions. (Russian summary) **80c:30010**

Juneja, Om Prakash *See* **Rizvi, S. R. H., 80h:30024**

Kar, A. K. Rearrangements of the coefficients of integral functions. **80l:30044**

Krasičkov-Ternovskiĭ, I. F. A geometric lemma useful in the theory of entire functions and theorems of Levinson type. (Russian) **80g:30017**

Miles, Joseph A theorem for entire functions of infinite order. **80m:30025**

Nevanlinna, Rolf On the minimal modulus of an entire function. (Russian summary) **80a:30028**

Niino, Kiyoshi On prime entire functions. **80g:30018**

Osgood, Charles F. (*with* Yang, Chung Chun) On entire functions having prescribed asymptotic behavior along the real axis. **80h:30023**

Ozawa, Mitsuru On the zero-one set of an entire function. II. **80m:30026**

Rahman, Q. I. *See* **Gervais, R., 80h:30022**

Rizvi, S. R. H. (*with* Juneja, Om Prakash) On the Fourier expansions of entire functions. **80h:30024**

Sen, S. On generalised fixpoints of transcendental entire functions. **80l:30045**

Shah, Swarupchand M. *See* **Fricke, G. H., 80c:30025**

Sharma, A. (*with* Tzimbalario, J.) Classes of functions defined by differential inequalities. **80j:30036**

Singh, S. K. (*with* Berg, John R.) The growth of entire and meromorphic functions. **80m:30027**

Tzimbalario, J. *See* **Sharma, A., 80j:30036**

Urabe, Hironobu On a factorization problem of certain entire functions and a theorem of Ostrovskiĭ. **80c:30026**

(*with* Yang, Chung Chun) On the zeros of an entire function which is periodic mod a non-constant entire function of order less than one. **80a:30029**

Vincze, I. *See* **Hayman, W. K., 80c:30010**

Wen, Guo Chun A generalization of entire functions with real negative zeros. (Chinese. English summary) **80c:30027**

Yang, Chung Chun *See* **Urabe, Hironobu, 80a:30029** *and* **Osgood, Charles F., 80h:30023**

Secondary classifications:

Blambert, Maurice (*with* Parvatham, Rajagopalam) On the lower order of entire functions defined by L-Dirichletian elements. (French summary) **(80j:30007)**

Guaia, E. A class of nonlinear operators that are equivalent to the derivative in the space of analytic functions on C. (Italian. English summary) **(80c:47060)**

Hille, Einar On a special Weyl-Titchmarsh problem. **(80k:34011)**

Mohon'ko, A. Z. Differential and functional equations with factors. (Russian) **(80m:34007)**

Parvatham, Rajagopalam *See* **Blambert, Maurice, (80j:30007)**

Šeremeta, M. M. The Wiman-Valiron method for entire functions that are defined by Dirichlet series. (Russian) **(80a:30004)**

30D30 Meromorphic functions, general theory

Beina, Charles (*with* Bonar, D. D.; Carroll, F. W.; Colwell, P.; Piranian, George) Strongly annular Tsuji functions. **80e:30011**

Bonar, D. D. *See* **Beina, Charles; et al., 80e:30011**

Carroll, F. W. *See* **Beina, Charles; et al., 80e:30011**

Cima, Joseph A. (*with* Schober, G.) On spaces of meromorphic functions. **80d:30021**

Colwell, P. *See* **Beina, Charles; et al., 80e:30011**

Lehto, Olli Value distribution of meromorphic functions. **80h:30025**

Mues, Erwin (*with* Steinmetz, Norbert) Meromorphe Funktionen, die mit ihrer Ableitung Werte teilen. (English summary) **80k:30025**

Narayanan, K. A. (*with* Padmanabhan, K. S.) A brief introduction to Nevanlinna theory of meromorphic functions. **80m:30028**

Padmanabhan, K. S. *See* **Narayanan, K. A., 80m:30028**

Piranian, George *See* **Beina, Charles; et al., 80e:30011**

Šahverdjan, A. Ju. Hyperbolic capacity and rate of decrease of meromorphic functions in a disk. (Russian. Armenian summary) **80j:30037**

Schober, G. *See* **Cima, Joseph A., 80d:30021**

Steinmetz, Norbert *See* **Mues, Erwin, 80k:30025**

Volkmann, Lutz Ein einfacher Beweis eines Satzes von Chung-Chun Yang über das Wachstum von $f(g)$. **80c:30028**

Zhang, Guang Hou Common Borel directions of meromorphic functions and their successive derivatives or integrals. I. (Chinese) **80d:30022a**

Common Borel directions of meromorphic functions and their successive derivatives or integrals. II. (Chinese) **80d:30022b**

Common Borel directions of meromorphic functions and their successive derivatives or integrals. III. (Chinese) **80d:30022c**

Secondary classifications:

Berg, John R. *See* **Singh, S. K., (80m:30027)**

Choodnovsky, Gregory V. A new method for the investigation of arithmetical properties of analytic functions. **(80j:10040)**

Mayer, D. H. On Ruelle's ζ-function for exponentially decreasing potentials. **(80j:82026)**

Mohon'ko, A. Z. Differential and functional equations with factors. (Russian) **(80m:34007)**

Reyssat, Éric Travaux récents de G. V. Čudnovskij. **(80m:10025)**

Rubel, Lee A. (*with* Squires, W. A.; Taylor, B. A.) Irreducibility of certain entire functions with applications to harmonic analysis. **(80d:32003)**

Singh, S. K. (*with* Berg, John R.) The growth of entire and meromorphic functions. **(80m:30027)**

Squires, W. A. *See* **Rubel, Lee A.; et al., (80d:32003)**

Taylor, B. A. *See* **Rubel, Lee A.; et al., (80d:32003)**

30D35 Distribution of values, Nevanlinna theory

Anderson, J. M. Asymptotic values of meromorphic functions of smooth growth. **80k:30026**

Bagdasarjan, D. T. Classes of meromorphic functions in multiply connected domains and their parametric representation. (Russian. Armenian summary) **80m:30029**

Barsegjan, G. A. Distribution of zeros of imaginary parts of meromorphic functions. (Russian) **80d:30023**

Bezpal'cev, O. A. A matrix analogue of Nevanlinna's theorem. (Russian. English summary) **80d:30024**

Bhoosnurmath, Subhas S. *See* **Gopalakrishna, H. S., 80a:30030; Gopalakrishna, H. S., 80b:30023** *and* **Gopalakrishna, H. S., 80f:30020**

Galda, Ju. R. Distribution of the values of a class of meromorphic functions. (Russian) **80k:30027**

Gol'dberg, A. A. Defective values of the derivative of a meromorphic function with a maximal sum of defects. (Russian) **80j:30038**

Gopalakrishna, H. S. (*with* Bhoosnurmath, Subhas S.) Exceptional values of a meromorphic function and its derivatives. **80b:30023**

(*with* Bhoosnurmath, Subhas S.) On the Nevanlinna characteristic of differential polynomials. **80a:30030**

(*with* Bhoosnurmath, Subhas S.) Borel exceptional values of differential polynomials. **80f:30020**

Gundersen, Gary G. Meromorphic functions that share three or four values. **80m:30030**

Hashimoto, Yûji On the deficiencies of algebroid functions. **80d:30025**

Kotman, Larry J. An entire function with irregular growth and more than one deficient value. **80m:30031**

Krytov, A. V. Magnitudes of deviations of entire curves with linearly dependent components. (Russian) **80m:30032**

Growth and distribution of the values of p-dimensional entire curves with linearly dependent components. (Russian) **80m:30033**

Defects of entire curves of finite lower order. (Russian) **80m:30034**

L'vova, S. V. Valiron defects of meromorphic functions and of holomorphic curves over a half-plane. (Russian) **80m:30035**

Megrabjan, L. H. Blaschke-Džrbašjan type products in the upper half-plane. (Russian) **80m:30036**

Miles, Joseph On entire functions of infinite order with radially distributed zeros. **80l:30046**

Mues, Erwin Zur Wertverteilung von Differentialpolynomen. **80j:30039**

Über ein Problem von Hayman. **80d:30026**

Murai, Takafumi Une remarque sur la distribution des valeurs des séries de Taylor aléatoires. (English summary) **80b:30024**

Nagore, C. Sri Hari *See* **Parvatham, Rajagopalam, 80l:30047**

Parvatham, Rajagopalam (*with* Nagore, C. Sri Hari) Characteristic function of a meromorphic function f and differential monomials in f. **80l:30047**

Patil, S. J. *See* **Sarangi, S. M., 80d:30028**

Petrenko, V. P. ★Рост мероморфных функций. (Russian) [Growth of meromorphic functions] **80d:30027**

On a regularity in the growth of meromorphic functions and of entire curves. (Russian) **80a:30031**

Sarangi, S. M. (*with* Patil, S. J.) On modified deficiencies of meromorphic functions. **80d:30028**

Sons, Linda R. Zeros of functions with slow growth in the unit disc. **80j:30040**

Growth and gap structure of functions in the unit disc. **80h:30026**

Steinmetz, Norbert Zur Wertverteilung von Exponentialpolynomen. (English summary) **80e:30012**

Volkmann, Lutz A simple proof of a theorem of J. M. Whittaker in the theory of meromorphic functions. **80g:30019**

Winkler, Jörg Zur Existenz ganzer Funktionen bei vorgegebener Menge der Nullstellen und Einsstellen. **80k:30028**

Zhang, Guang Hou The length of an asymptotic path of an entire function. **80m:30037**

Zhuang, Qi Tai Sequences of filling circles and Borel directions of meromorphic functions. (Chinese) **80k:30029**

Sur les suites de cercles de remplissage et les directions de Borel des fonctions méromorphes. **80m:30038**

Secondary classifications:

Bank, Steven B. On the hypertranscendence of meromorphic solutions of certain functional equations. **(80h:39002)**

Beckenbach, E. F. The counterspherical representation of a minimal surface. **(80f:53008)**

Bergman, Stefan On value distribution of an analytic function of two complex variables in a polyhedron. (Russian summary) **(80b:32024)**

Bolko, S. S. (*with* Petrenko, V. P.) Asymptotic properties of the solutions of linear differential equations with entire coefficients. (Russian) **(80d:34007)**

Fricke, G. H. (*with* Shah, Swarupchand M.) On bounded value distribution and bounded index. **(80c:30025)**

Lehto, Olli Value distribution of meromorphic functions. **(80h:30025)**

Meyer, Gottfried P. Über die Nullstellen von Exponentialsummen längs einer logarithmischen Wechsellinie. **(80k:30012)**

Mues, Erwin (*with* Steinmetz, Norbert) Meromorphe Funktionen, die mit ihrer Ableitung Werte teilen. (English summary) **(80k:30025)**

Ozawa, Mitsuru On the existence of prime periodic entire functions. (80b:30022)
On the zero-one set of an entire function. II. (80m:30026)
Petrenko, V. P. *See* Boĭko, S. S., (80d:34007)
Sadullaev, A. Valiron defect planes of a holomorphic mapping. (Russian) (80b:32043)
Shah, Swarupchand M. *See* Fricke, G. H., (80c:30025)
Steinmetz, Norbert *See* Mues, Erwin, (80k:30025)

30D40 Cluster sets, prime ends, boundary behavior

Belna, Charles (*with* Evans, Michael J.; Humke, Paul D.) Most directional cluster sets have common values. 80d:30029
B.rberjan, S. L. Angular boundary values of functions of T_H classes. (Russian. Armenian summary) 80f:30021
Černý, Ilja Several theorems concerning extensions of meromorphic and conformal mappings. (Czech summary) 80i:30048
Childress, C. L. (*with* Csordas, G. L.) The theory of cluster sets in the unit polydisc. 80i:30049
(*with* Csordas, G. L.) One-sided cluster-set theory in a polydisc. 80i:30050
Csordas, G. L. *See* Childress, C. L., 80i:30049 *and* Childress, C. L., 80i:30050
Divarišvili, I. A. Some tests for the existence of angular boundary values of analytic functions. (Russian. Georgian and English summaries) 80a:30032
Evans, Michael J. (*with* Humke, Paul D.) Directional cluster sets and essential directional cluster sets of real functions defined in the upper half plane. 80k:30030
See also Belna, Charles; et al., 80d:30029
Humke, Paul D. *See* Belna, Charles; et al., 80d:30029 *and* Evans, Michael J., 80k:30030
Hwang, Jun Shung (*with* Jackson, H. L.) Some results on Kuramochi thin sets. 80m:30039
Jackson, H. L. *See* Hwang, Jun Shung, 80m:30039
Lah, Wolfgang Über cluster sets analytischer Funktionen. 80f:30022
Universalfunktionen in einfach zusammenhängenden Gebieten. 80m:30040
Mirzojan, M. M. Maximality theorems for arbitrary and meromorphic functions along tangential directions. (Russian. Armenian summary) 80c:30029
The characteristic of boundary peculiarities of meromorphic functions and functions that are generated by cluster sets along tangential directions. (Russian. Armenian summary) 80c:30030
Nilmura, Mikio On a uniqueness theorem. 80j:30041
On boundary cluster sets. 80j:30042
On asymptotic values of meromorphic functions. 80i:30051
Rudin, Walter Inner function images of radii. 80d:30030
Segawa, Shigeo Functions meromorphic on some Riemann surfaces. 80c:30031
Sorokina, A. V. The existence of continuous functions with a given set of *GV*-singularities. (Russian) 80g:30020
Yamashita, Shinji A theorem of Beurling and Tsuji is best possible. 80b:30025

Secondary classifications:

Belna, Charles (*with* Bonar, D. D.; Carroll, F. W.; Colwell, P.; Piranian, George) Strongly annular Tsuji functions. (80e:30011)
Bonar, D. D. *See* Belna, Charles; et al., (80e:30011)
Campbell, Douglas M. Continuity of Cima and Rung's extension and nonnormal meromorphic functions. (80k:30032)
Carroll, F. W. *See* Belna, Charles; et al., (80e:30011)
Chang, Sun Yung A. (*with* Hwang, Jun Shung) On curvilinear and fine Abel limit. (80g:30001)
Colwell, P. *See* Belna, Charles; et al., (80e:30011)
Dragosh, Stephen (*with* Rung, Donald C.) Normal functions bounded on arcs and a proof of the Gross cluster-value theorem. (80j:30043)
Hwang, Jun Shung *See* Chang, Sun Yung A., (80g:30001)
Ikegami, Teruo The boundary behavior of analytic mappings of Riemann surfaces. (80m:30055)
Lesley, F. D. On interior and conformal mappings of the disk. (80i:30016)
Piranian, George *See* Belna, Charles; et al., (80e:30011)
Rung, Donald C. *See* Dragosh, Stephen, (80j:30043)
Yamashita, Shinji Conformality and semiconformality of a function holomorphic in the disk. (80h:30018)

30D45 Normal functions, normal families

Anderson, J. M. (*with* Rubel, Lee A.) Hypernormal meromorphic functions. 80b:30026
Burkova, E. F. *See* Gavrilov, V. I., 80i:30052
Campbell, Douglas M. (*with* Wickes, Gene H.) The spherical derivative and normal functions. II. 80g:30021b
(*with* Wickes, Gene H.) Characterizations of normal meromorphic functions. 80k:30031
Continuity of Cima and Rung's extension and nonnormal meromorphic functions. 80k:30032
(*with* Cima, Joseph A.; Stephenson, Kenneth) A Bloch function in all H^p classes, but not in BMOA. 80k:30033
Cima, Joseph A. *See* Campbell, Douglas M.; et al., 80k:30033
Dragosh, Stephen (*with* Rung, Donald C.) Normal functions bounded on arcs and a proof of the Gross cluster-value theorem. 80j:30043
Gavrilov, V. I. (*with* Burkova, E. F.) Meromorphic functions generating normal families on subgroups of unit circle automorphisms. (Russian) 80i:30052
Gu, Yong Xing Sur les familles normales de fonctions méromorphes. 80a:30033
Lappan, Peter The spherical derivative and normal functions. 80g:30021a
On the normality of derivatives of functions. 80a:30034
Rubel, Lee A. *See* Anderson, J. M., 80b:30026
Rung, Donald C. *See* Dragosh, Stephen, 80j:30043
Smyth, W. F. Constant limit of a sequence of iterates. 80d:30031
Sons, Linda R. Gap series and normal functions. 80d:30032
Stephenson, Kenneth *See* Campbell, Douglas M.; et al., 80k:30033
Wickes, Gene H. *See* Campbell, Douglas M., 80g:30021b *and* Campbell, Douglas M., 80k:30031

Secondary classifications:

Williams, Richard K. How analytic functions preserve closeness. (80b:54052)
Yamashita, Shinji Conformality and semiconformality of a function holomorphic in the disk. (80h:30018)

30D50 Blaschke products, bounded characteristic, bounded functions, functions with positive real part

Arov, D. Z. Boundary values of a convergent sequence of meromorphic matrix-valued functions. (Russian) 80j:30044
Beller, E. (*with* Pinchuk, B.) Minimal H^2 interpolation in the Carathéodory class. 80b:30027
Campbell, Douglas M. (*with* Wickes, Gene H.) The Bloch-Nevanlinna conjecture revisited. 80b:30028
Cargo, G. T. Blaschke products and singular functions with prescribed boundary values. 80i:30053
Horowitz, Charles Coefficients of nonvanishing functions in H^∞. 80a:30035
Morse, H. Stephen Destructible and indestructible Blaschke products. 80k:30034
Nakamura, Yoshikuni *See* Yanagihara, Niro, 80f:30024
Patil, D. A. (*with* Thakare, Nimbakrishna) On extreme points of functions of order α with positive real part and related results. 80e:30013
Pinchuk, B. *See* Beller, E., 80b:30027
Piranian, George Inner functions with a level-set of infinite length. 80j:30045
Šamojan, F. A. A factorization theorem of M. M. Džrbašjan and the characteristic of zeros of functions analytic in the circle with a majorant of finite growth. (Russian. Armenian and English summaries) 80i:30054
Stephenson, Kenneth The finite range of an inner function. 80m:30041
Two counterexamples involving inner functions. 80f:30023
Thakare, Nimbakrishna *See* Patil, D. A., 80e:30013
Wickes, Gene H. *See* Campbell, Douglas M., 80b:30028
Yanagihara, Niro (*with* Nakamura, Yoshikuni) Composition operators on the class N^+. 80f:30024
Younis, Rahman Interpolation by a finite Blaschke product. 80k:30035
Zaharjan, V. S. Segment variation of a potential of Green type. (Russian. Armenian summary) 80d:30033

Secondary classifications:

Aaronson, Jon Ergodic theory for inner functions of the upper half plane. (French summary) (80b:28018)
Amar, Éric Représentation des fonctions de BMO et solutions de l'équation $\bar\partial_b$. (80h:46050)
Chow, Kwang Nan (*with* Protas, David) The maximal ideal space of bounded, analytic, Dirichlet finite functions. (80k:46062)
Clozda, Krystyna Sur la classe des fonctions convexes vers l'axe réel négatif. (English and Russian summaries) (80m:30011)
Forelli, Frank The extreme points of some classes of holomorphic functions. (80m:30053)
Goodman, A. W. Koebe domains for certain families. (80d:30006)
Hruščëv, S. V. The problem of simultaneous approximation and of removal of the singularities of Cauchy type integrals. (Russian) (80j:30055)
Lappan, Peter On the normality of derivatives of functions. (80a:30034)
Megrabjan, L. H. Blaschke-Džrbašjan type products in the upper half-plane. (Russian) (80m:30036)
Mogra, M. L. On a class of functions with positive real part. (80i:30020)
Nevanlinna, Rolf On the minimal modulus of an entire function. (Russian summary) (80a:30028)
Nikol'skiĭ, N. K. Bases of invariant subspaces and operator interpolation. (Russian) (80b:47021)
Protas, David *See* Chow, Kwang Nan, (80b:46062)
Vasjunin, V. I. Unconditionally convergent spectral decompositions and interpolation problems. (Russian) (80b:47041)
Videnskiĭ, I. V. Simultaneous interpolation by Blaschke products. (Russian. English summary) (80a:30039)

30D55 H^p-classes

Ahern, Patrick The mean modulus and the derivative of an inner function. 80h:30027
Aleksandrov, A. B. Approximation by rational functions and an analogue of M. Riesz's theorem on conjugate functions for the space L^p with $p \in (0, 1)$. (Russian) 80m:30042
Baernstein, Albert, II Some sharp inequalities for conjugate functions. 80g:30022
Goldberg, David Local Hardy spaces. 80i:30055
Hasumi, Morisuke Hardy classes on plane domains. 80d:30034
Remarks on Hardy classes on plane domains. 80h:30028
Holland, Finbarr (*with* Twomey, John B.) Hardy spaces of close-to-convex functions and their derivatives. 80h:30029
Latter, Robert H. The atomic decomposition of Hardy spaces. 80j:30046
Leung, Kar Kei On the boundary behaviour of functions orthogonal to invariant subspaces. 80j:30047
Macías, Roberto A. (*with* Segovia, Carlos) A maximal theory for generalized Hardy spaces. 80k:30036
Matheson, A. A multiplier theorem for analytic functions of slow mean growth. 80j:30048
Raina, A. K. On the role of Hardy spaces in form factor bounds. 80a:30036
Ricci, Fulvio (*with* Weiss, Guido) A characterization of $H^1(\Sigma_{n-1})$. 80m:30043
Šamojan, F. A. A class of Toeplitz operators that are connected with the divisibility of

analytic functions. (Russian) **80j:30049**

Sarason, Donald ★Function theory on the unit circle. **80d:30035**

Segovia, Carlos *See* **Macías, Roberto A., 80k:30036**

Stephenson, Kenneth Functions which follow inner functions. **80h:30030**

Stoll, Manfred Invertible and weakly invertible singular inner functions in the Bergman spaces. **80f:30025**

Švedenko, S. V. *See* **Turku, H., 80i:30056**

Trent, Tavan T. Extension of a theorem of Szegő. **80j:30050**

Turku, H. (*with* Švedenko, S. V.) Interpolation of l^p sequences by H^2 functions over a half-plane. **80i:30056**

Twomey, John B. *See* **Holland, Finbarr, 80h:30029**

Walczak, Stanisław Investigations of conditional extrema in the class of Hardy functions and in the family of univalent functions. I. (Polish summary) **80f:30026a**

Investigations of conditional extrema in the class of Hardy functions and in the family of univalent functions. II. (Polish summary) **80f:30026b**

Wang, Si Lei The behavior of functions regular in the unit circle. (Chinese) **80d:30036**

Weiss, Guido Some problems in the theory of Hardy spaces. **80j:30051**

See also **Ricci, Fulvio, 80m:30043**

Yamashita, Shinji Criteria for functions to be of Hardy class H^p. **80h:30031**

Zarantonello, Sergio E. A representation of H^p-functions with $0<p<\infty$. **80g:30023**

Secondary classifications:

Bennett, Colin (*with* Sharpley, Robert C.) Weak-type inequalities for H^p and BMO. **(80j:46044)**

Campbell, Douglas M. (*with* Cima, Joseph A.; Stephenson, Kenneth) A Bloch function in all H^p classes, but not in BMOA. **(80k:30033)**

Caprini, I. Integral equations for the analytic extrapolation of scattering amplitudes with positivity constraints. (Italian and Russian summaries) **(80j:81076)**

Cima, Joseph A. *See* **Campbell, Douglas M.; et al., (80k:30033)**

Davis, Burgess Applications of the conformal invariance of Brownian motion. **(80j:60105)**

Brownian motion and analytic functions. **(80j:30001)**

Jones, Peter W. Constructions for BMO(R) and $A_p(\mathbf{R}^n)$. **(80k:42010)**

A complete bounded complex submanifold of $\mathbf{C}^3$. **(80i:32011)**

Kriete, Thomas On the structure of certain $H^2(\mu)$ spaces. **(80i:46045)**

Logan, B. F. Limits in L_p of convolution transforms with kernels $aK(at)$, $a\to 0$. **(80f:44004a)**

Inequalities and minimum norm kernels for the Hardy class H_p. **(80f:44004b)**

Maurey, Bernard Isomorphismes entre espaces H_1. (English summary) **(80d:60067)**

Sedleckiĭ, A. M. Bases consisting of exponentials in E^p spaces on convex polygons. (Russian) **(80d:30003)**

Sharpley, Robert C. *See* **Bennett, Colin, (80j:46044)**

Širokov, N. A. Ideals and factorization in algebras of analytic functions that are smooth up to the boundary. (Russian) **(80j:46085)**

Siedd, W. T. On multipliers of H^p spaces. **(80b:42010)**

Stephenson, Kenneth *See* **Campbell, Douglas M.; et al., (80k:30033)**

Extremal problems in function theory ★Extremal problems in function theory. (Japanese) **(80e:30002)**

Function theory *See* **Extremal problems in function theory, (80e:30002)**

Kyoto *See* **Extremal problems in function theory, (80e:30002)**

Symposium:

Extremal Problems in Function Theory *See* **Extremal problems in function theory, (80e:30002)**

30D60 Quasianalytic and other classes of functions

Schiff, J. L. On a class of analytic functions of Smirnov. **80h:30032**

Stegenga, David A. A geometric condition which implies BMOA. **80h:30033**

Secondary classifications:

Hruščëv, S. V. The problem of simultaneous approximation and of removal of the singularities of Cauchy type integrals. (Russian) **(80j:30055)**

Macías, Roberto A. (*with* Segovia, Carlos) A maximal theory for generalized Hardy spaces. **(80k:30036)**

Miniowitz, Ruth Distortion theorems for quasiregular mappings. **(80j:30026)**

Pommerenke, Ch. Uniformly perfect sets and the Poincaré metric. **(80j:30073)**

Segovia, Carlos *See* **Macías, Roberto A., (80k:30036)**

Srivastava, P. D. On the space of certain class of analytic functions. **(80g:30032)**

30D99 None of the above, but in this section

Cima, Joseph A. The basic properties of Bloch functions. **80k:30037**

Hwang, Jun Shung On an extremal property of Doob's class. **80i:30057**

Rubel, Lee A. (*with* Timoney, Richard M.) An extremal property of the Bloch space. **80k:30034**

Timoney, Richard M. *See* **Rubel, Lee A., 80k:30034**

Secondary classifications:

König, Heinz On the Marcel Riesz estimation for conjugate functions in the abstract Hardy algebra situation. **(80k:46060)**

30Exx Miscellaneous topics of analysis in the complex domain

30E05 Moment problems, interpolation problems

Abrahamse, M. B. The Pick interpolation theorem for finitely connected domains. **80j:30052**

Avdonin, S. A. Solution of the exponential moment problem in the space $L^2(0,\infty)$. (Russian. English summary) **80a:30037**

Berenstein, Carlos Alberto (*with* Taylor, B. A.) A new look at interpolation theory for entire functions of one variable. **80j:30053**

Borosh, Itshak (*with* Chui, Charles K.) Uniqueness of solutions to a two-dimensional mean problem. **80i:30058**

Chui, Charles K. *See* **Borosh, Itshak, 80i:30058**

Delsarte, Philippe (*with* Genin, Yves V.; Kamp, Yves G.) The Nevanlinna-Pick problem for matrix-valued functions. **80h:30035**

Garnett, John B. Harmonic interpolating sequences, L^p and BMO. **80g:30024**

Genin, Yves V. *See* **Delsarte, Philippe; et al., 80h:30035**

Kamp, Yves G. *See* **Delsarte, Philippe; et al., 80h:30035**

Lipčinskiĭ, A. G. Convergence of interpolational rational fractions. (Russian) **80a:30038**

Taylor, B. A. *See* **Berenstein, Carlos Alberto, 80j:30053**

Videnskiĭ, I. V. Simultaneous interpolation by Blaschke products. (Russian. English summary) **80a:30039**

Secondary classifications:

Korobeĭnik, Ju. F. The problem of moments, of interpolation and of being a basis. (Russian) **(80g:46034)**

Oskolkov, V. A. Some bases in spaces of regular functions and their application to interpolation. (Russian) **(80a:30005)**

Paltzin, Carlos On a problem of moments. I. **(80k:42010)**

Ryavec, C. A nonlinear analogue of the cardinal series. **(80g:10036)**

Švedenko, S. V. *See* **Turku, H., (80i:30056)**

Turku, H. (*with* Švedenko, S. V.) Interpolation of l^p sequences by H^2 functions over a half-plane. **(80i:30056)**

Younis, Rahman Interpolation by a finite Blaschke product. **(80k:30035)**

30E10 Approximation in the complex domain

Alibekov, G. A. On the approximation of functions of a complex variable on arcs and in domains with a smooth boundary. (Ukrainian. English and Russian summaries) **80a:30040**

Andrīēvs'kiĭ, V. V. Approximation of functions by partial sums of a series of Faber polynomials on continua with a nonzero local geometric characteristic. (Russian. English summary) **80h:30036**

Bilii, V. Ī. (*with* Tamrazov, P. M.) Moduli of smoothness and polynomial approximations of functions in quasiconformal domains. (Russian) **80b:30029**

Blatt, Hans-Peter (*with* Klotz, Volker) Zur Anzahl der Interpolationspunkte polynomialer Tschebyscheff-Approximationen im Einheitskreis. (English summary) **80f:30027**

de Branges, Louis The Riemann mapping theorem. **80g:30025**

Dixon, M. (*with* Korevaar, J.) Nonspanning sets of powers on curves: analyticity theorem. **80e:30014**

Dveirin, M. Z. Questions of best approximation of classes of functions, analytic on the unit circle. (Russian) **80f:30028**

Dyn'kin, E. M. Estimates for analytic functions in Jordan domains. (Russian. English summary) **80a:30041**

Edrei, Albert Angular distribution of the zeros of Padé polynomials. **80b:30030**

Ganelius, T. Some extremal functions and approximation. **80j:30054**

Gončar, A. A. The rate of rational approximation of certain analytic functions. (Russian) **80a:30042**

Gunson, J. (*with* Ng, P. H.) Approximation of special functions of complex variables. **80e:30015**

Jones, William B. (*with* Thron, W. J.) Sequences of meromorphic functions corresponding to a formal Laurent series. **80f:30029**

Klotz, Volker *See* **Blatt, Hans-Peter, 80f:30027**

Korevaar, J. Lacunary forms of Walsh's approximation theorems. **80k:30038**

See also **Dixon, M., 80e:30014**

Lou, Yuan Ren *See* **Shen, Xie Chang, 80a:30043**

Loxton, J. H. (*with* Van der Poorten, Alfred J.) Multidimensional generalizations of the Padé table. **80h:30037**

Ng, P. H. *See* **Gunson, J., 80e:30015**

O'Farrell, Anthony G. Rational approximation in Lipschitz norms. II. **80m:30044**

Roth, Alice Uniform approximation by meromorphic functions on closed sets with continuous extension into the boundary. **80d:30037**

Ševčuk, I. A. The function classes $H^{\mathfrak{M}(Q)}_{\Lambda,\mathfrak{M}}$ on sets $\mathfrak{M}$ of the complex plane. (Russian) **80f:30030**

Shah, S. H. Approximation of meromorphic functions by rational functions. **80e:30016**

Shah, Swarupchand M. Chebyshev approximation constants related to entire functions of perfectly regular growth. **80f:30031**

Shen, Xie Chang (*with* Lou, Yuan Ren) Best approximation by rational functions on the unit circle. (Chinese) **80a:30043**

Tamrazov, P. M. Structural and approximational properties of functions in the complex domain. **80a:30044**

See also **Bilii, V. Ī., 80b:30029**

Thron, W. J. *See* **Jones, William B., 80f:30029**

Van der Poorten, Alfred J. *See* **Loxton, J. H., 80h:30037**

Wang, James Li Ming Approximation by rational modules on nowhere dense sets. **80g:30026**

Secondary classifications:

Afolabi, M. O. (*with* Geddes, K. O.) Near-minimax interpolation of analytic functions on regular polygons. **(80g:65009)**

Appiah, R. K. Padé methods of Hurwitz polynomial approximation with application to linear system reduction. **(80d:93061)**

Bilii, V. Ī. (*with* Tamrazov, P. M.) Moduli of smoothness and polynomial approximations of functions in quasi-conformal domains. (Russian) **(80d:30014)**

Brennan, James E. The integrability of the derivative in conformal mapping. **(80b:30009)**

Danilov, L. V. Rational approximations of some functions at rational points. (Russian) **(80a:10046)**

Erdős, Paul (*with* Newman, Donald J.; Reddy, A. R.) Rational approximation. II. **(80e:41008)**

Fryant, Allan J. Interpolation and approximation of generalized axisymmetric potentials. **(80d:35030)**

Gauthier, P. M. (*with* Goldstein, M.; Ow, W. H.) Approximation uniforme sur des parties non bornées par des fonctions essentiellement harmoniques. (English summary) **(80j:30066)**

Geddes, K. O. Near-minimax polynomial approximation in an elliptical region. **(80a:65062)**

See also **Afolabi, M. O.**, **(80g:65009)**

Goldstein, M. *See* **Gauthier, P. M.**; **et al.**, **(80j:30066)**

Grigorjan, M. D. Approximation by rational fractions in Orlicz spaces without the Δ_2-condition. (Russian. Armenian summary) **(80i:46026)**

Hedberg, Lars Inge Approximation in L^p by analytic and harmonic functions. **(80j:46046)**

Iliev, G. L. Parametric approximations of partial analytic functions. **(80g:41017)**

Kriete, Thomas On the structure of certain $H^2(\mu)$ spaces. **(80i:46045)**

Luh, Wolfgang Universalfunktionen in einfach zusammenhängenden Gebieten. **(80m:30040)**

Mason, J. C. Near-best L_∞ and L_1 approximations to analytic functions on two-dimensional regions. **(80h:41001)**

Newman, Donald J. *See* **Erdős, Paul**; **et al.**, **(80e:41008)**

O'Farrell, Anthony G. Analytic capacity and equicontinuity. **(80d:46099)**

Ow, W. H. *See* **Gauthier, P. M.**; **et al.**, **(80j:30066)**

Reddy, A. R. *See* **Erdős, Paul**; **et al.**, **(80e:41008)**

Saff, Edward B. (*with* Varga, Richard S.) Nonuniqueness of best complex rational approximations to real functions on real intervals. **(80f:41012)**

Tasmazov, P. M. *See* **Bilii, V. I.**, **(80d:30014)**

Varga, Richard S. *See* **Saff, Edward B.**, **(80f:41012)**

30E15 Asymptotic representations in the complex domain

Drummond, J. E. On reducing to zero the remainder of an asymptotic series. **80m:30045**

Riekstiņš, E. Asymptotic expansion of a class of entire functions that are determined by Hadamard's logarithmic composition. (Russian) **80b:30031**

Secondary classifications:

Gunson, J. (*with* Ng, P. H.) Approximation of special functions of complex variables. **(80e:30015)**

Ng, P. H. *See* **Gunson, J.**, **(80e:30015)**

Rodin, Burton (*with* Warschawski, Stefan E.) Estimates for conformal maps of strip domains without boundary regularity. **(80k:30013)**

Warschawski, Stefan E. *See* **Rodin, Burton**, **(80k:30013)**

30E20 Integration, integrals of Cauchy type, integral representations of analytic functions [See also 45Exx.]

Andronikou, Anastasios M. (*with* Wright, Fred M.) On the equality of two Stieltjes integrals in the complex plane. **80d:30038**

Decewicz, Grzegorz (*with* Leksiński, Wacław) On some class preserved by a singular integral with a deviated argument. **80i:30059**

Gerus, O. F. Some estimates of moduli of smoothness of integrals of Cauchy type. (Russian) **80a:30045**

Halmuradov, È. A singular Cauchy integral weakened by a logarithmic factor. (Russian) **80k:30039**

Hilger, R. W. (*with* Michaliček, J. F.) An integral representation of holomorphic functions. **80f:30032**

Hruščëv, S. V. The problem of simultaneous approximation and of removal of the singularities of Cauchy type integrals. (Russian) **80j:30055**

Leksiński, Wacław *See* **Decewicz, Grzegorz**, **80i:30059**

Michaliček, J. F. *See* **Hilger, R. W.**, **80f:30032**

Rahimov, R. M. The singular integral over a system of intersecting nonsmooth contours. (Russian. Tajiki summary) **80k:30040**

A Cauchy type integral along the boundary of a union of regions and the jump problem. (Russian. Tajiki summary) **80m:30046**

Rusev, P. K. Analytische Fortsetzung der Laplaceschen Transformation einer Klasse analytischer Funktionen. **80j:30056**

Výborný, R. On the use of a differentiable homotopy in the proof of the Cauchy theorem. **80f:30033**

Wright, Fred M. *See* **Andronikou, Anastasios M.**, **80d:30038**

Secondary classifications:

Dyn'kin, E. M. Estimates for analytic functions in Jordan domains. (Russian. English summary) **(80a:30041)**

Dżangibekov, G. Study of the solvability of a singular two-dimensional integral equation with complex conjugate unknown function. (Russian. Tajiki summary) **(80j:45007)**

Goldoni, R. Faster-than-light phenomena in special and in general relativity. **(80a:83048)**

Vinogradov, S. A. Continuity of perturbed integral operators, Cauchy type integrals, maximal operators. (Russian. English summary) **(80a:47083)**

Zarantonello, Sergio E. A representation of H^p-functions with $0<p<\infty$. **(80g:30023)**

30E25 Boundary value problems [See also 45Exx.]

Akbarov, R. The Hilbert problem for a piecewise analytic function with given principal parts. (Russian. English summary) **80g:30027**

Aksent'ev, L. A. Symmetric solutions of inverse boundary value problems. (Russian) **80i:30060**

(*with* Hohlov, Ju. E.; Širokova, E. A.) The uniqueness of the solution of the exterior inverse boundary value problem. (Russian) **80f:30034**

Alekno, A. G. Carleman's boundary value problem with infinite index of arbitrary power order. (Russian. English summary) **80a:30046**

Aleksa, P. Ju. Necessary and sufficient conditions for the solvability of an inhomogeneous Riemann boundary value problem with a negative infinite index of logarithmic order $\min(\alpha, \beta)>1$ for the half-plane. (Russian. Lithuanian and English summaries) **80b:30032**

Amenzade, Ju. A. (*with* Gur'ev, N. F.) The first boundary value problem for a circular disk with linear cuts. (Russian. Azerbaijani and English summaries) **80f:30035**

Arseni, V. F. (*with* Evseev, E. G.; Hubedžašvili, Š. S.) ★К приближенному решению граничных задач со сдвигом. (Russian) [On the approximate solution of boundary value problems with a shift] **80f:30036**

Avhadiev, R. G. (*with* Žurbenko, L. N.) A generalization of the inverse boundary value problem in x and the stability of its solution. (Russian) **80j:30057**

Babaev, A. A. Solvability of a nonlinear boundary value problem for analytic functions. (Russian) **80e:30017**

Biaderman, Zbigniew On some problem of Hilbert-Vekua type for infinite sequences of functions. (Polish and Russian summaries) **80i:30061**

Čibrikova, L. I. (*with* Sil'vestrov, V. V.) On the question of the effectiveness of the solution of Riemann's boundary value problem for automorphic functions. (Russian) **80j:30058**

Čorlev, H. Regular stability of the Riemann boundary value problem and calculation of partial indices. (Russian) **80b:30038**

Evseev, E. G. *See* **Arseni, V. F.**; **et al.**, **80f:30036**

Florian, Helmut (*with* Heersink, Rudolf) Ein verallgemeinertes Riemann-Hilbertsches Randwertproblem. (English summary) **80j:30059**

Gabrinovič, V. A. The Carleman boundary value problem for polyanalytic functions. (Russian) **80b:30033**

Gogonea, Sorin Sur quelques problèmes aux limites pour les fonctions analytiques dans le plan muni de coupures le long d'une circonférence. (Italian summary) **80e:30018**

Gur'ev, N. F. *See* **Amenzade, Ju. A.**, **80f:30035**

Hać, Aleksander (*with* Słysz, Roman) A nonlinear Hilbert-Riemann problem with boundary conditions of the class L_p^*. **80m:30047**

Heersink, Rudolf *See* **Florian, Helmut**, **80j:30059**

Hohlov, Ju. E. *See* **Aksent'ev, L. A.**; **et al.**, **80f:30034**

Hubedžašvili, Š. S. *See* **Arseni, V. F.**; **et al.**, **80f:30036**

Iacob, Caius Methods for solving the plane Dirichlet problem in some special cases. (Russian summary) **80d:30039**

Isahanov, R. S. A linear boundary value problem for some holomorphic functions. (Russian) **80c:30032**

A general boundary value problem. (Russian. Georgian and English summaries) **80j:30060**

Issa, R. B. On the theory of the Riemann boundary value problem. (Russian) **80b:30034**

Jacko, A. I. (*with* Jacko, S. I.) The generalized Riemann boundary value problem with piecewise continuous coefficients. (Russian) **80b:30035**

Jacko, S. I. *See* **Jacko, A. I.**, **80b:30035**

Jakovenko, V. M. *See* **Kapilvii, O. O.**, **80c:30033**

Juhanovov, N. N. A generalized boundary value problem of conjugacy and its approximate solution. (Russian) **80e:30019**

Kac, B. A. A Riemann boundary value problem with an oscillating coefficient. (Russian) **80a:30047**

A Riemann boundary value problem with a coefficient that allows discontinuities of vibrational type. (Russian) **80b:30036**

Kaĭdan, V. O. *See* **Pobilevič, V. O.**, **80m:30050**

Kapilvii, O. O. (*with* Jakovenko, V. M.) A mixed boundary value problem of x^k-analytic functions for a half-plane with a cut along the arc of the circumference. (Russian. English summary) **80c:30033**

Kokilašvili, V. M. (*with* Paatašvili, V. A.) A problem of linear conjugation with measurable coefficients for a class of boundary curves. (Russian. Georgian and English summaries) **80j:30061**

Kutateladze, G. A. Riemann-Hilbert problem for a circular annulus. (Russian. Georgian and English summaries) **80m:30048**

Kvitko, A. N. On the theory of the Riemann boundary value problem for generalized analytic functions, in the case of a multiple contour on a plane. (Russian) **80k:30041**

Mišnjakov, N. T. (*with* Nikolaičuk, A. M.) Noether's theory for a general boundary value problem with Carleman shift and conjugation in a class of generalized analytic functions. (Russian) **80k:30042**

Nikolaičuk, A. M. *See* **Mišnjakov, N. T.**, **80k:30042**

Oniani, G. A. Integral representations and boundary properties of analytic and harmonic functions in the unit disc. (Russian. Georgian and English summaries) **80b:30037**

Paatašvili, V. A. *See* **Kokilašvili, V. M.**, **80j:30061**

Pančenko, I. F. The Riemann problem for n pairs of functions on a Riemann surface, in the case of a complex contour, in the space $L_p^*(\Gamma)$. (Russian) **80m:30049**

See also **Zvirovič, E. Ì.**, **80a:30050**

Pčel'nik, V. K. A Carleman boundary value problem with a discontinuous quasiconformal shift. (Russian. English summary) **80k:30043**

Pobilevič, V. O. (*with* Kaĭdan, V. O.) The ranges of values of certain functionals on special classes of analytic functions. (Russian) **80m:30050**

Primačuk, L. P. An integrable case of the Riemann problem with a substitution matrix. (Russian. English summary) **80a:30048**

Seĭfullaev, R. K. Relationship of the number of linearly independent solutions of a Riemann boundary value problem to properties of the jump curve. (Russian) **80m:30051**

Selim, M. S. A nonlinear loaded boundary value problem of Hilbert's type. (Russian) **80m:30052**

Šelko, M. A. Approximate solution of the Riemann boundary value problem with

discontinuous coefficients. (Russian) **80d:30040**

Sil'vestrov, V. V. *See* **Čibrikova, L. L.** **80j:30058**

Širokova, E. A. Some questions on the univalence of solutions of inverse boundary value problems. (Russian) **80h:30039**

See also **Aksent'ev, L. A.; et al.,** **80f:30034**

Słysz, Roman *See* **Hać, Aleksander,** **80m:30047**

Sznitko, Wanda Remarks on a discontinuous Hilbert boundary problem. **80i:30062**

Tutschke, Wolfgang The Riemann-Hilbert problem for nonlinear systems of differential equations in the plane. (Russian) **80b:30038**

Vekua, N. P. An inhomogeneous Riemann-Hilbert boundary value problem for systems of analytic functions. (Russian. Georgian and English summaries) **80a:30049**

The Riemann-Hilbert boundary value problem for several unknown functions. (Russian. Georgian and English summaries) **80j:30062**

Žurbenko, L. N. The stability of the solutions of inverse boundary value problems for multiply connected domains in the case of the parameter x. (Russian) **80j:30063**

See also **Avhadiev, R. G.,** **80j:30057**

Zvirovič, E. Ì. (*with* Pančenko, I. F.) A Riemann boundary value problem for n pairs of functions on a Riemann surface in the space $L_p^n(\Gamma)$. (Russian) **80a:30050**

Secondary classifications:

(Andrianov, N. F.) *See* **Parton, V. Z.; et al.,** **(80a:73001)**

Beyer, Klaus (*with* Zeidler, Eberhard) Existenz- und Eindeutigkeitsbeweise für Gezeitenwellen mit allgemeinen Wirbelverteilungen. **(80h:86001)**

Černomaz, V. N. (*with* Ševčenko, V. Ì.) The problem of linear conjugation for a holomorphic vector in four-dimensional space. (Russian) **(80a:32004)**

Černiĭ, Ju. I. *See* **Gabov, F. D.,** **(80j:45001)**

Gabov, F. D. (*with* Černiĭ, Ju. I.) ★Уравнения типа свертки. (Russian) [Equations of convolution type] **(80j:45001)**

Hvedelidze, B. V. The problem of linear conjugacy and of characteristic singular integral equations. (Russian) **(80e:45003)**

Kakičev, V. A. Analysis of the conditions of solvability for a Riemann problem of the second kind. (Russian) **(80d:32005)**

Knjaz', A. I. Boundary value problems of the theory of functions in the theory of the electromagnetic field. (Russian. English summary) **(80e:78007)**

Koval'ov, V. F. The Dirichlet problem for certain domains with rectilinear boundaries. (Russian) **(80d:35045)**

Kuliev, V. D. (*with* Sadyhov, A. È.) The Riemann problem for two pairs of functions and its application in elasticity theory. (Russian. English and Armenian summaries) **(80f:73073)**

Martynenko, Mih. D. (*with* Šipka, Ì. G.) A boundary value problem for a metaharmonic fourth-order equation in regions with a gap. (Russian. English summary) **(80k:31003)**

Mulloev, S. *See* **Sanginov, A.,** **(80a:35089)**

Murtazaev, D. The Riemann-Hilbert problem for a system of first-order equations of composite type with two double characteristics. (Russian. Tajiki summary) **(80f:35084)**

Parton, V. Z. (*with* Perlin, P. I.) ★Интегральные уравнения теории упругости. (Russian) [Integral equations in elasticity theory] **(80a:73001)**

Perlin, P. I. *See* **Parton, V. Z.,** **(80a:73001)**

Sadyhov, A. È. *See* **Kuliev, V. D.,** **(80f:73073)**

Sanginov, A. (*with* Mulloev, S.) A boundary value problem for a system of equations of composite type with multiple characteristics. (Russian. Tajiki summary) **(80a:35089)**

(Šerman, D. I.) *See* **Parton, V. Z.; et al.,** **(80a:73001)**

Ševčenko, V. Ì. *See* **Černomaz, V. N.,** **(80a:32004)**

Šipka, Ì. G. *See* **Martynenko, Mih. D.,** **(80k:31003)**

(Stupak, S. F.) *See* **Parton, V. Z.; et al.,** **(80a:73001)**

Tjurikov, E. V. A Hilbert nonlinear boundary value problem for quasilinear elliptic systems. (Russian) **(80k:35039)**

Zeidler, Eberhard *See* **Beyer, Klaus,** **(80h:86001)**

30E99 None of the above, but in this section

Secondary classifications:

Čerepenin, N. D. On the theory of the motion of bodies under the surface of a fluid. (Russian) **(80a:76009)**

Maklakov, D. V. An investigation of the cavitational flow around a symmetric wedge in a longitudinal gravitational field. (Russian) **(80a:76004)**

Muhammed, Ibragim èl' Taher Muhammed Pure bending of an infinite strip with an elliptic aperture. (Russian. Azerbaijani and English summaries) **(80a:73011)**

Nishimoto, Katsuyuki Fractional differintegration of products. **(80m:26008)**

Fractional differintegration of the logarithmic function. **(80m:26009)**

Phelps, J. S., III *See* **Siewert, C. E.,** **(80b:73020)**

Siewert, C. E. (*with* Phelps, J. S., III) On solutions of a transcendental equation basic to the theory of vibrating plates. **(80b:73020)**

30Fxx Riemann surfaces

Secondary classifications:

Jørgensen, Troels Closed geodesics on Riemann surfaces. **(80b:53006)**

30F10 Compact Riemann surfaces and uniformization [See also 14H15, 32G15.]

Farkas, H. M. Singular points of theta functions, quadric relations and holomorphic differentials with prescribed zeros. **80j:30064**

Horiuchi, Ryutaro Normal coverings of hyperelliptic Riemann surfaces. **80k:30044**

Ioffe, M. S. Some problems of the calculus of variations "in the large" for conformal and quasiconformal imbeddings of Riemann surfaces. (Russian) **80e:30020**

Medvyh, A. D. Determination of the number of nonequivalent coverings over a compact Riemann surface. (Russian) **80a:30051**

Unramified coverings of compact Riemann surfaces. (Russian) **80d:30041**

Močalov, V. V. The Riemann problem on an open Riemann surface of the class O_{KD}. (Russian) **80e:30021**

Randol, Burton Cylinders in Riemann surfaces. **80j:30065**

Secondary classifications:

Accola, Robert D. M. On Castelnuovo's inequality for algebraic curves. I. **(80k:14006)**

Burbea, Jacob Capacities and spans on Riemann surfaces. **(80f:30007)**

Buser, Peter Riemannsche Flächen mit grosser Kragenweite. **(80k:53071)**

Cubic graphs and the first eigenvalue of a Riemann surface. **(80b:58061)**

Čučšev, V. V. Schottky type spaces (g, s, m). (Russian) **(80m:32027)**

Gehring, Frederick W. Remarks on the universal Teichmüller space. **(80d:30012)**

Grauert, Hans (*with* Remmert, R.) ★Theorie der Steinschen Räume. **(80j:32001)**

Miyahara, Yasushi On relations between conformal mappings and isomorphisms of spaces of analytic functions on Riemann surfaces. **(80e:30005)**

Mok, T. T. On Weierstrass points of analytic plane curves and a conjecture of Mumford. **(80c:14014)**

Patterson, David B. The fundamental group of the modulus space. **(80g:32042)**

Randol, Burton The length spectrum of a Riemann surface is always of unbounded multiplicity. **(80k:58100)**

Remmert, R. *See* **Grauert, Hans,** **(80j:32001)**

Seppälä, Mika Teichmüller spaces of Klein surfaces. **(80g:32043)**

Zarrow, Robert On Earle's mod n relative Teichmüller spaces. **(80a:32019)**

30F15 Harmonic functions on Riemann surfaces

Forelli, Frank The extreme points of some classes of holomorphic functions. **80m:30053**

Gauthier, P. M. (*with* Goldstein, M.; Ow, W. H.) Approximation uniforme sur des parties non bornées par des fonctions essentiellement harmoniques. (English summary) **80j:30066**

Goldstein, M. *See* **Gauthier, P. M.; et al.,** **80j:30066**

Guerrero, Ignacio Quasiconformal variation of the Green's function. **80i:30063**

Nagasaka, Yukio Notes on extremizations. **80j:30067**

Nakai, Mitsuru (*with* Sario, Leo) Banach spaces of harmonic functions in L_p. **80h:30040**

Ow, W. H. *See* **Gauthier, P. M.; et al.,** **80j:30066**

Sario, Leo *See* **Nakai, Mitsuru,** **80h:30040**

Wang, Cecilia Y. Stiffness of harmonic functions. **80i:30064**

Secondary classifications:

Kuramochi, Zenjiro On quasi-Dirichlet bounded harmonic functions. **(80k:31001)**

30F20 Classification theory of Riemann surfaces

Kato, Takao Non-hyperelliptic Weierstrass points of maximal weight. **80b:30040**

Sakai, Makoto Analytic functions with finite Dirichlet integrals on Riemann surfaces. **80d:30042**

Schmieder, Gerald Maximalschlichte Konkretisierung Riemannscher Flächen. **80m:30054**

Secondary classifications:

Segawa, Shigeo Functions meromorphic on some Riemann surfaces. **(80c:30031)**

30F25 Ideal boundary theory

Ikegami, Teruo The boundary behavior of analytic mappings of Riemann surfaces. **80m:30055**

Secondary classifications:

Nilmura, Mikio On a uniqueness theorem. **(80j:30041)**

30F30 Differentials on Riemann surfaces

Kaplan, Wilfred On the trajectories of a quadratic differential. I. **80h:30041**

McKean, H. P. (*with* Trubowitz, E.) Hill's surfaces and their theta functions. **80b:30039**

Saitoh, Saburou The Dirichlet norm and the norm of Szegő type. **80j:30068**

Taniguchi, Masahiko Abelian differentials whose squares have closed trajectories on compact Riemann surfaces. **80g:30028**

Trubowitz, E. *See* **McKean, H. P.,** **80b:30039**

Watanabe, Osamu On the existence of behavior spaces of harmonic differentials. (Japanese) **80e:30022**

Secondary classifications:

Duma, Andrei Holomorphe Differentiale höherer Ordnung auf kompakten Riemannschen Flächen. **(80g:14026)**

Fornaess, John Erik The Ahlfors estimate. **(80e:32019)**

Klimentov, S. B. Deformations of closed surfaces of the family $p > 1$ with a given infinitely small variation of the metric. (Russian) **(80k:53094)**

30F35 Fuchsian groups and automorphic functions [See also 10Dxx, 20H10, 32Gxx, 32Nxx.]

Aulaskari, Rauno On normal additive automorphic functions. **80c:30034**

Canov, V. V. On the characterization of hyperelliptic Riemann surfaces. **80j:30071**

Cohen, Jeffrey M. On Hurwitz extensions by $PSL_2(7)$. **80j:30069**

Harvey, William James Kleinian groups (a survey). **80h:30042**

Helling, H. Real algebraic models of Teichmüller spaces. **80h:30043**

Hoare, A. H. M. On lifting Fuchsian groups. **80m:30056**
Kim, Sang Moon Restriction of Poincaré's operator and boundedness of integrable forms. **80h:30044**
Kuiken, Kathryn The effect of rational substitutions on the monodromy group of the general nth order equation of the Fuchsian class. **80h:30045**
Nicholls, P. (*with* Zarrow, Robert) Convex fundamental regions for Fuchsian groups. II. **80i:30065**
Patterson, S. J. Some examples of Fuchsian groups. **80j:30070**
Purzitsky, Norman A cutting and pasting of noncompact polygons with applications to Fuchsian groups. **80k:30045**
Sekigawa, Hisao The outradius of the Teichmüller space. **80a:30052**
Wagreich, Philip Automorphic forms and singularities of complex surfaces. **80i:30046**
Yamamoto, Hiro-o Squeezing deformations in Schottky spaces. **80g:30029**
Zarrow, Robert *See* **Nicholls, P., 80i:30065**

Secondary classifications:

Buser, Peter The collar theorem and examples. **(80h:53046)**
Chen, Su Shing Poincaré series and negatively curved manifolds. **(80c:53045)**
Chetiya, B. P. On a theorem of Poincaré. **(80c:20067)**
Earle, Clifford J. Teichmüller theory. **(80m:32028)**
Ehrlich, Paul E. Boundary points of the Dirichlet fundamental region. **(80k:53070)**
Humphries, Stephen P. Generators for the mapping class group. **(80i:57010)**
Jørgensen, Troels Comments on a discreteness condition for subgroups of $SL(2, \mathbf{C})$. **(80h:22013)**
Kleiman, Steven L. *See* **Lønsted, Knud, (80g:14028)**
Kuiken, Kathryn On the monodromy groups of Riemann surfaces of genus zero. **(80g:20051)**
Kulkarni, Ravindra S. Infinite regular coverings. **(80c:57002)**
Kuznecov, E. N. Application of automorphic functions in two-dimensional theory of elasticity. **(80j:73012)**
Laudal, O. A. (*with* Lønsted, Knud) Deformations of curves. I. Moduli for hyperelliptic curves. **(80g:14027)**
Lønsted, Knud (*with* Kleiman, Steven L.) Basics on families of hyperelliptic curves. **(80g:14028)**
See also **Laudal, O. A., (80g:14027)**
Sekigawa, Hisao Schwarzian derivatives of some conformal mappings. **(80j:30029)**
Skriganov, M. M. *See* **Venkov, A. B., (80i:10036)**
Stothers, W. W. Diagrams associated with subgroups of Fuchsian groups. **(80j:20048)**
Venkov, A. B. (*with* Skriganov, M. M.) On the question of H. Weyl's formula in the spectral theory of automorphic functions. (Russian) **(80i:10036)**
Wielenberg, Norbert The structure of certain subgroups of the Picard group. **(80b:57010)**

30F40 Kleinian groups [See also 20H10.]

Apanasov, B. N. (*with* Tetenov, A. V.) The existence of nontrival quasiconformal deformations of Kleinian groups in space. (Russian) **80e:30023**
Entire automorphic forms in $\mathbf{R}^n$. (Russian) **80e:30024**
Čučšev, V. V. Some submanifolds of spaces of Koebe groups. (Russian) **80e:30025**
Gusevskiĭ, N. A. On two classes of Kleinian groups. (Russian) **80a:30053**
Topological characterizations of a Schottky group. (Russian) **80m:30057**
Ivaşcu, Dumitru The Schottky space in dimensions greater than two. **80m:30058**
On Klein-Maskit combination theorems. **80m:30059**
Kruškal', S. L. Quasiconformal stability of Kleinian groups. (Russian) **80k:30046**
Marden, A. (*with* Maskit, B.) On the isomorphism theorem for Kleinian groups. **80f:30037**
Maskit, B. *See* **Marden, A., 80f:30037**
Nakada, Masami Dimension of cohomology spaces of infinitesimally deformed Kleinian groups. **80j:30072**
Pommerenke, Ch. Uniformly perfect sets and the Poincaré metric. **80j:30073**
Tetenov, A. V. *See* **Apanasov, B. N., 80e:30023**

Secondary classifications:

Apanasov, B. N. On Mostow's rigidity theorem. (Russian) **(80k:22004)**
Gentilesco, James A. Automorphisms of the deformation space of a Kleinian group. **(80f:32017)**
Homma, Masaaki On Weierstrass points of Riemann surfaces associated with $\Gamma(n, 2n)$. **(80j:14016)**
Jørgensen, T. (*with* Marden, A.; Maskit, B.) The boundary of classical Schottky space. **(80k:32028)**
Kulkarni, Ravindra S. Infinite regular coverings and Kleinian groups. **(80e:57054)**
Some topological aspects of Kleinian groups. **(80j:57044)**
Marden, A. *See* **Jørgensen, T.; et al., (80k:32028)**
Maskit, B. *See* **Jørgensen, T.; et al., (80k:32028)**
Wolpert, Scott The length spectra as moduli for compact Riemann surfaces. **(80j:58067)**
Kleinian groups and Riemann surfaces ★Kleinian groups and Riemann surfaces. (Japanese) **(80e:30003)**
Kyoto *See* **Kleinian groups and Riemann surfaces, (80e:30003)**
Riemann surfaces *See* **Kleinian groups and Riemann surfaces, (80e:30003)**
Symposium:
Kleinian Groups and Riemann Surfaces *See* **Kleinian groups and Riemann surfaces, (80e:30003)**

30F99 None of the above, but in this section

Abdulaeva, I. I. On the unitary property of a singular operator on a closed Riemann surface. (Russian) **80a:30054**
Hubbard, John (*with* Masur, Howard) Quadratic differentials and foliations. **80h:30047**
Jenkins, James A. (*with* Suita, Nobuyuki) On the representation and compactification of Riemann surfaces. **80e:30035**
Kato, Takao Conformal self-mappings of Riemann surfaces. (Japanese) **80d:30043**
Masur, Howard *See* **Hubbard, John, 80h:30047**
Osada, Masayuki A generalization of a theorem of Radó-Stout to analytic functions on open Riemann surfaces. **80b:30041**
Segawa, Shigeo Bounded analytic functions on unbounded covering surfaces. **80e:30026**
Suita, Nobuyuki *See* **Jenkins, James A., 80e:30035**
Švarcman, O. V. *See* **Vinberg, È. B., 80k:30047**
Vinberg, È. B. (*with* Švarcman, O. V.) Riemann surfaces. (Russian) **80k:30047**

Secondary classifications:

Beardon, A. F. (*with* Pommerenke, Ch.) The Poincaré metric of plane domains. **(80a:30020)**
Ghiṣa, Dorin The behaviour of some metrics on Riemann surfaces in respect with quasiconformal mappings. **(80k:30020)**
Gunning, R. C. On the divisor order of vector bundles of rank two on a Riemann surface. **(80c:32031)**
Heins, Maurice A realization problem in the theory of analytic curves. **(80e:32028)**
Henn, Hans-Wolfgang Minimalanzahl von Weierstrasspunkten. **(80e:14016)**
Kato, Takao On criteria of $\hat{g}$-hyperellipticity. **(80k:14040)**
Kramm, Bruno Ein Approximationssatz für holomorphe Funktionen auf nicht-kompakten Riemannschen Flächen. (English summary) **(80j:46084)**
Pančenko, I. F. *See* **Zvirovič, E. Ì., (80a:30050)**
Pommerenke, Ch. *See* **Beardon, A. F., (80a:30020)**
Stephenson, Kenneth The finite range of an inner function. **(80m:30041)**
Yamaguchi, Hiroshi Fonctions entières paraboliques dans $\mathbf{C}^2$. **(80g:32006)**
Zvirovič, E. Ì. (*with* Pančenko, I. F.) A Riemann boundary value problem for n pairs of functions on a Riemann surface in the space $L_p^a(\Gamma)$. (Russian) **(80a:30050)**

30Gxx Generalized function theory

30G05 Non-Archimedean function theory [See also 12J25.]

30G10 Nonstandard function theory [See also 03H05.]

30G15 Topological function theory

Andreian Cazacu, Cabiria A theorem of Denjoy-Stoilow. (Russian) **80b:30042**

Secondary classifications:

Pelling, M. J. On the singularity set of complex functions satisfying the Cauchy-Riemann equations. **(80i:30041)**

30G20 Generalizations of Vekua type (pseudoanalytic, p-analytic, etc.)

Bliev, N. K. (*with* Otelbaev, M.) On the theory of generalized analytic functions of I. N. Vekua. (Russian. Georgian and English summaries) **80a:30056**
Goldschmidt, Bernd Funktionentheoretische Eigenschaften der Lösungen der Vekuaschen Differentialgleichung mit Koeffizienten in $L_{p,\text{loc}}(G)$. **80g:30030**
Kapšivīĭ, O. O. *See* **Oleksandrovič, Ì. M.; et al., 80a:30055**
Oleksandrovič, Ì. M. Solution of a boundary value problem of $e^{ax}y$-analytic functions for a half-plane with cuts. (Russian) **80d:30044**
(*with* Kapšivīĭ, O. O.; Paharēva, N. O.) Integral representations of p-analytic functions and the solution of mixed problems. (Russian. English summary) **80a:30055**
Otelbaev, M. *See* **Bliev, N. K., 80a:30056**
Paharēva, N. O. *See* **Oleksandrovič, Ì. M.; et al., 80a:30055**
Schleiff, M. *See* **Schubert, Hans, 80c:30036**
Schubert, Hans (*with* Schleiff, M.) Aspects on the calculation of two singular integral operators needed in the theory of generalized analytic functions. (Russian summary) **80c:30036**
Sprössig, Wolfgang Räumliches Analogon zum komplexen T-Operator. **80c:30037**

Secondary classifications:

Aleksandrov, A. Ja. (*with* Solov'ev, Ju. I.) ★Пространственные задачи теории упругости. (Russian) [Three-dimensional problems of the theory of elasticity] **(80f:73001)**
Bauer, Karl Wilhelm Zur iterierten Gleichung der verallgemeinerten axial-symmetrischen Potentialtheorie. (Russian summary) **(80k:35023)**
Florian, Helmut (*with* Heersink, Rudolf) Ein verallgemeinertes Riemann-Hilbertsches Randwertproblem. (English summary) **(80j:30059)**
Gabrinovič, V. A. The Carleman boundary value problem for polyanalytic functions. (Russian) **(80b:30033)**
Heersink, Rudolf *See* **Florian, Helmut, (80j:30059)**
Ibragimov, V. A. An application of the theory of generalized analytic functions. (Russian) **(80d:73038)**
Jakovenko, V. M. *See* **Kapšivīĭ, O. O., (80c:30033)**
Kapšivīĭ, O. O. (*with* Jakovenko, V. M.) A mixed boundary value problem of x^k-analytic functions for a half-plane with a cut along the arc of the circumference. (Russian. English summary) **(80c:30033)**
(*with* Stojan, N. M.) An axially symmetric problem for an elastic space with two symmetric hyperboloid cuts. (Russian. English summary) **(80f:73025)**
Kajaz', A. I. Applications of functions of a complex variable to calculations of three-dimensional fields. (Russian) **(80d:78018)**
Kvitko, A. N. On the theory of the Riemann boundary value problem for generalized analytic functions, in the case of a multiple contour on a plane. (Russian) **(80k:30041)**
Le Hung Son Eindeutigkeitseigenschaft eines Fortsetzungssatzes für verallgemeinerte analytische Funktionen mehrerer komplexer Variabler. **(80i:32018)**

Verfahren zur Fortsetzung verallgemeinerter analytischer Funktionen mehrerer komplexer Variabler. **(80f:32017)**

Magomedov, G. A. (*with* Palamodov, V. P.) Generalized analytic functions of several variables. (Russian) **(80c:32005)**

Malonek, H. On the question of validity of theorems of Phragmén-Lindelöf type for solutions of complex differential inequalities. (Russian. Armenian and English summaries) **(80k:30003)**

Martić, Branislav On some systems of partial differential equation and on some classes of nonanalytic functions. (Serbo-Croatian summary) **(80f:35079)**

Mihaĭlov, L. G. Conditions for compatibility of a generalized Cauchy-Riemann system with many variables. (Russian. Tajiki summary) **(80h:32003)**

Varieties of solutions of a generalized Cauchy-Riemann system with several variables. (Russian. Tajiki summary) **(80h:32004)**

Milnjakov, N. T. (*with* Nikolaĭčuk, A. M.) Noether's theory for a general boundary value problem with Carleman shift and conjugation in a class of generalized analytic functions. (Russian) **(80k:30042)**

Nikolaĭčuk, A. M. *See* **Milnjakov, N. T., (80k:30042)**

Palamodov, V. P. *See* **Magomedov, G. A., (80c:32005)**

Solov'ev, Ju. I. *See* **Aleksandrov, A. Ja., (80f:73001)**

Stojan, N. M. *See* **Kapšivli, O. O., (80f:73025)**

Vekua, I. N. Some new applications of generalized Cauchy-Riemann equations in the theory of shells. (Russian) **(80k:73052)**

Yu, Chung Ling Generalized conjugate function theorems for solutions of first-order elliptic systems on the plane. **(80d:35055)**

30G25 Discrete analytic functions

Berzsenyi, George Methods for constructing linear difference operators which simulate analyticity. **80a:30057**

Ergaliev, A. θ-discrete analytic functions. (Russian) **80m:30060**

Harman, C. J. Discrete geometric function theory. I. **80a:30058**

Jentsch, Werner Bemerkung zu den diskret-analytischen Funktionen. **80a:30059**

Mirzaev, Č. Ė. Multipoint approximation of the Cauchy-Riemann equation and entire functions with discrete complex argument. (Russian) **80a:30060**

30G30 Other generalizations of analytic functions (including abstract-valued functions)

Bredikhin, B. S. Monogenic functions in algebras of dual numbers and biquaternions of parabolic type. (Russian) **80k:30048**

Mizori-Oblak, Pavlina (*with* Vidav, Ivan) On entire matrix-valued functions. **80b:30043**

Sprössig, Wolfgang Analoga zu funktionentheoretischen Sätzen im $\mathbb{R}^n$—Anwendungen auf mehrdimensionale singuläre Integralgleichungen. **80f:30038**

Vidav, Ivan *See* **Mizori-Oblak, Pavlina, 80b:30043**

Secondary classifications:

Bart, H. (*with* Kaballo, Winfried) Local invertibility of meromorphic operator functions. **(80d:47020)**

Bezpal'cev, O. A. A matrix analogue of Nevanlinna's theorem. (Russian. English summary) **(80d:30024)**

Hile, Gerald N. Elliptic systems in the plane with first-order terms and constant coefficients. **(80d:35050)**

Ivanov, S. On holomorphic relative inverses of operator-valued functions. **(80c:47002)**

Kaballo, Winfried *See* **Bart, H., (80d:47020)**

Kisilevskiĭ, G. Ė. On entire operator-valued functions of exponential type. (Russian) **(80g:34061)**

Nguyen-Xuan-Loc Sur la théorie des fonctions finement holomorphes. (English summary) **(80c:31006)**

30G35 Functions of hypercomplex variables and generalized variables

Brackx, F. F. The exponential function of a quaternion variable. **80m:30061**

Furuta, Yoshito *See* **Hoshi, Seiichi, 80i:30066**

Hoshi, Seiichi (*with* Furuta, Yoshito) The properties of power series of quaternions and their numerical calculation (the synthetic report). **80i:30066**

Sudbery, A. Quaternionic analysis. **80g:30031**

Secondary classifications:

Roşculeţ, Marcel N. Sur les équations aux dérivées partielles qui expriment les conditions de monogénéité, itérées. **(80d:35036)**

30G99 None of the above, but in this section

Secondary classifications:

Redheffer, Raymond Matrix equations in the Siegel disk. **(80g:34012)**

30H05 Spaces and algebras of analytic functions [See also 32E25, 46Exx, 46J15.]

Reich, Edgar Uniqueness of Hahn-Banach extensions from certain spaces of analytic functions. **80j:30074**

Srivastava, P. D. On the space of certain class of analytic functions. **80g:30032**

Secondary classifications:

de Branges, Louis The Riemann mapping theorem. **(80g:30025)**

Cima, Joseph A. (*with* Schober, G.) On spaces of meromorphic functions. **(80d:30021)**

Globevnik, J. Analytic extensions and selections. **(80h:46077)**

Halmuradov, Ė. A singular Cauchy integral weakened by a logarithmic factor. (Russian) **(80k:30039)**

Hruščev, S. V. The problem of simultaneous approximation and of removal of the singularities of Cauchy type integrals. (Russian) **(80j:30055)**

Jain, Daulat R. *See* **Jain, Pawan Kumar, (80j:46117)**

Jain, Pawan Kumar (*with* Jain, Daulat R.) Locally K-convex space of entire functions on $K \times K$ of finite growth. (Serbo-Croatian summary) **(80j:46117)**

Kalinin, S. I. Sufficient sets for entire functions of exponential type. (Russian) **(80g:46027)**

Konovalov, V. M. On the problem of widths of classes of analytic functions. (Russian) **(80a:46015)**

Krasičkov-Ternovskiĭ, I. F. Local description of closed ideals and submodules of analytic functions of a single variable. I. (Russian) **(80f:46044)**

Morimoto, Mitsuo Analytic functionals with non-compact carrier. **(80d:46074)**

Muhly, Paul S. Ergodic Hardy spaces and duality. **(80h:46081)**

Nagnibida, M. Ì. The roots of the operator of multiple integration in a space of functions analytic in the disc. (Russian) **(80g:47038)**

Nikol'skiĭ, N. K. An attempt to use the factor-operator for the localization of z-invariant subspaces. (Russian) **(80e:46019)**

O'Farrell, Anthony G. Analytic capacity and equicontinuity. **(80d:46099)**

von Renteln, M. Topologische Nullteiler und endlich erzeugte Ideale in gewissen Algebren holomorpher Funktionen. **(80d:46100)**

Ryndina, V. V. On the equivalence between an nth order differential operator with a regular singular point and an Euler operator in the space A_R. (Russian) **(80f:47067)**

Schober, G. *See* **Cima, Joseph A., (80d:30021)**

Tanaka, Jun-ichi A note on Helson's existence theorem. **(80b:46061)**

Trent, Tavan T. Extension of a theorem of Szegő. **(80j:30050)**

Wronicz, Z. Construction of an orthonormal basis in the space of functions analytic in a disc and of class C^n in its closure. **(80k:46026)**

31–XX POTENTIAL THEORY (For probabilistic potential theory, see 60J45.)

31–01 Elementary exposition, textbooks

31–02 Advanced exposition (research surveys, monographs, etc.)

Secondary classifications:

Dellacherie, Claude (*with* Meyer, Paul-André) ★Probabilities and potential. **(80b:60004)**

Meyer, Paul-André *See* **Dellacherie, Claude, (80b:60004)**

31–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

(Green, George) *See* **Mayer, Daniel, (80j:01020)**

Mayer, Daniel George Green—founder of the mathematical theory of electrical and magnetic phenomena. (Czech. Russian and English summaries) **(80j:01020)**

31–04 Explicit machine computation and programs (not the theory of computation or programming)

31–06 Proceedings, conferences, etc.

(Hirsch, Francis) *See* **Séminaire: Théorie du Potentiel, 80d:31001** *and* **Séminaire: Théorie du Potentiel, 80e:31001**

(Mokobodzki, Gabriel) *See* **Séminaire: Théorie du Potentiel, 80d:31001** *and* **Séminaire: Théorie du Potentiel, 80e:31001**

Paris *See* **Séminaire: Théorie du Potentiel, 80d:31001** *and* **Séminaire: Théorie du Potentiel, 80e:31001**

Potential theory *See* **Séminaire: Théorie du Potentiel, 80d:31001** *and* **Séminaire: Théorie du Potentiel, 80e:31001**

Séminaire:

Brelot-Choquet-Deny *See* **Séminaire: Théorie du Potentiel, 80d:31001** *and* **Séminaire: Théorie du Potentiel, 80e:31001**

Théorie du Potentiel ★Séminaire de Théorie du Potentiel, Paris, No. 3. **80d:31001**
★Séminaire de Théorie du Potentiel. No. 4. **80e:31001**

31Axx Two-dimensional theory

Secondary classifications:

Jeffrey, D. J. The temperature field or electric potential around two almost touching spheres. **(80d:78017)**

(Van Dyke, M.) *See* **Jeffrey, D. J., (80d:78017)**

31A05 Harmonic, subharmonic, superharmonic functions

Barth, K. F. (*with* Brannan, D. A.; Hayman, W. K.) The growth of plane harmonic functions along an asymptotic path. **80b:31001**

Brannan, D. A. *See* **Barth, K. F.; et al., 80b:31001**

Fenton, P. C. On sufficient conditions for harmonicity. **80m:31001**
The infimum of small subharmonic functions. **80j:31001**

Hayman, W. K. *See* **Barth, K. F.; et al., 80b:31001**

Krasičkov-Ternovskiĭ, I. F. Estimates for a subharmonic difference of subharmonic functions. II. (Russian) **80c:31001a**

Letter to the editor: "Estimates for a subharmonic difference of subharmonic functions. II" (Mat. Sb. (N.S.) **103(145)** (1977), no. 1, 69–111). (Russian) **80c:31001b**

Kuramochi, Zenjiro On quasi-Dirichlet bounded harmonic functions. **80k:31001**

Rippon, P. J. On a growth condition related to the MacLane class. **80g:31001**

Secondary classifications:

Gerontopoulos, P. ★Molodensky's problem in the plane. **(80c:86005)**

Griffiths, H. B. Structural stability of planar potentials. **(80g:58038)**

König, Heinz On the Marcel Riesz estimation for conjugate functions in the abstract Hardy algebra situation. **(80k:46060)**

31A10 Integral representations

Secondary classifications:

Matsuda, Minoru Inequalities for Green functions and logarithmic capacities. **(80k:31002)**

31A15 Potentials and capacity, harmonic measure, extremal length [See also 30C85.]

Anger, Gottfried (*with* Czerner, Regine) The extreme measures in the inverse problem of the heat equation. **80g:31002**

Aupetit, Bernard (*with* Wermer, John) Capacity and uniform algebras. **80a:31001**

Czerner, Regine *See* **Anger, Gottfried, 80g:31002**

Gaier, D. Capacitance and the conformal module of quadrilaterals. **80f:31001**

Górski, Jerzy Some properties of the equilibrium mass distribution on a compact set in the plane. (Polish summary) **80a:31002**

Lieutvietis, O. I. An equation for the density of the potential of a simple layer on a piecewise smooth contour. (Russian) **80b:31002**

Matsuda, Minoru Inequalities for Green functions and logarithmic capacities. **80k:31002**

Meyer, Burnett Inequalities for the logarithmic capacity. **80j:31002**

Talagrand, Michel Capacités invariantes extrémales. (English summary) **80d:31002**

Wermer, John *See* **Aupetit, Bernard, 80a:31001**

Secondary classifications:

Dahlberg, Björn E. J. On the distribution of Fekete points. **(80c:31003)**

Ghiṣa, Dorin The behaviour of some metrics on Riemann surfaces in respect with quasiconformal mappings. **(80k:30020)**

Juhl, Andreas The inverse problem for the wave equation. **(80g:35124)**

Koosis, Paul Harmonic estimation in certain slit regions and a theorem of Beurling and Malliavin. **(80d:31007)**

Zaharjan, V. S. Segment variation of a potential of Green type. (Russian. Armenian summary) **(80d:30033)**

31A20 Boundary behavior (theorems of Fatou type, etc.)

Godefroid, Michel Sur un article de Kawamura et Nakai à propos du principe de Picard. (English summary) **80j:31003**

Král, Josef Boundary behavior of potentials. **80m:31002**

31A25 Boundary value and inverse problems

Gabov, S. A. Applications of angular potential: integral equations for the plane problem with an oblique derivative for harmonic functions. (Russian) **80l:31001**

Kühnau, Reiner Bemerkung zu einer klassischen Arbeit von J. Blumenfeld und W. Mayer. **80g:31003**

Secondary classifications:

Bogatyrev, V. A. Solvability of a nonlinear problem with free boundary. (Russian) **(80j:35042)**

Isakov, V. M. On uniqueness of solutions for inverse problems of potential theory. **(80k:35064)**

Oniani, G. A. Integral representations and boundary properties of analytic and harmonic functions in the unit disc. (Russian. Georgian and English summaries) **(80b:30037)**

Pavlov, G. A. On the inverse problem of the total potential of mass. (Russian) **(80d:35143)**

Serikbaev, A. U. A two-dimensional inverse problem of the logarithmic potential of a simple layer that is close to a given one. (Russian) **(80l:35182)**

31A30 Biharmonic, polyharmonic functions and equations, Poisson's equation

Martynenko, Mih. D. (*with* Šipka, Ĭ. G.) A boundary value problem for a metaharmonic fourth-order equation in regions with a gap. (Russian. English summary) **80k:31003**

Šipka, Ĭ. G. *See* **Martynenko, Mih. D., 80k:31003**

Secondary classifications:

Bauer, Karl Wilhelm Zur iterierten Gleichung der verallgemeinerten axial-symmetrischen Potentialtheorie. (Russian summary) **(80b:35023)**

Gaveau, Bernard Valeurs frontières des fonctions harmoniques et holomorphes. Cas du disque et du bidisque. (English summary) **(80l:32020)**

Iosif'jan, G. A. *See* **Oleĭnik, O. A., (80g:73013a)** *and* **Oleĭnik, O. A., (80g:73013b)**

Oleĭnik, O. A. (*with* Iosif'jan, G. A.) A mixed problem for a system of equations of elasticity theory and Saint-Venant's principle. (Russian) **(80g:73013b)**

(*with* Iosif'jan, G. A.) Saint-Venant's principle in the plane theory of elasticity, and boundary value problems for a biharmonic equation in unbounded domains. (Russian) **(80g:73013a)**

31A35 Connections with differential equations

Kawamura, Michihiko On a conjecture of Nakai on Picard principle. **80b:31001**

Secondary classifications:

Godefroid, Michel Sur un article de Kawamura et Nakai à propos du principe de Picard. (English summary) **(80j:31003)**

31A99 None of the above, but in this section

31Bxx Higher-dimensional theory

31B05 Harmonic, subharmonic, superharmonic functions

Armitage, D. H. Representations of superharmonic functions in half-spaces. **80d:31004**

On the derivatives at the origin of entire harmonic functions. **80l:31002**

Uniqueness theorems for harmonic functions which vanish at lattice points. **80m:31003a**

Harmonic functions with polynomial growth on lattice points. **80m:31003b**

Spherical extrema of harmonic polynomials. **80l:31003**

Half-spherical means and harmonic majorization in half-spaces. **80j:31004**

Representations of harmonic functions in half-spaces. **80d:31003**

Benedicks, Michael Positive harmonic functions vanishing on the boundary of certain domains in $\mathbf{R}^{n+1}$. **80m:31004**

Dahlberg, Björn E. J. Harmonic functions in Lipschitz domains. **80c:31002**

Dümmel, Siegfried Notwendige und hinreichende Bedingungen für die Darstellbarkeit von harmonischen Funktionen in Form von Potentialen. **80m:31005**

Fryant, Allan J. Growth of entire harmonic functions in $\mathbf{R}^3$. **80a:31003**

Gulliermé, Jean Extrémalisation harmonique d'un couple de fonctions continues. **80j:31005**

Janušauskas, Algimantas Positive harmonic functions. (Russian) **80j:31006**

Kesten, Harry Positive harmonic functions with zero boundary values. **80m:31006**

Koosis, Paul Harmonic estimation in certain slit regions and a theorem of Beurling and Malliavin. **80d:31007**

Neri, Umberto Harmonic functions with BMO boundary values. **80j:31007**

O'Farrell, Anthony G. A characterisation of harmonic functions. **80b:31003**

Sun, Ji Guang Harmonic functions on a class of real classical domains. (Chinese) **80j:31008**

Secondary classifications:

Ancona, Alano Une propriété d'invariance des ensembles absorbants par perturbation d'un opérateur elliptique. **(80d:35144)**

Baxter, J. R. Harmonic functions and mass cancellation. **(80a:60085)**

Buristein, E. I. On a separable potential in spheroconical coordinates which satisfies the Laplace equation. **(80b:70005)**

Koosis, Paul Sommabilité de la fonction maximale et appartenance à H_1. Cas de plusieurs variables. (English summary) **(80b:42011)**

Mastrangelo-Dehen, Michèle Différentiabilité stochastique des fonctions finement harmoniques. (English summary) **(80b:60096)**

31B10 Integral representations

Sjödin, Tord Capacities of compact sets in linear subspaces of $\mathbf{R}^n$. **80k:31004**

Secondary classifications:

Atabodžaev, M. A. (*with* Kobilov, U. È.) The Cauchy problem for the Laplace equation in an infinite three-dimensional layer. (Russian) **(80e:35016)**

Kobilov, U. È. *See* **Atabodžaev, M. A., (80e:35016)**

31B15 Potentials and capacities, extremal length

Choquet, Gustave Noyaux de convolution sur-exponentiels sur $\mathbf{R}^n$. (English summary) **80e:31002**

Dahlberg, Björn E. J. On the distribution of Fekete points. **80c:31003**

Regularity properties of Riesz potentials. **80g:31004**

Dümmel, Siegfried (*with* Siewert, Erdmute) Richtungsableitungen von k-dimensionalen Potentialen. **80l:31004**

Frostman, Otto Sur un principe du maximum. (Russian summary) **80b:31002**

McCoy, Peter A. Approximation and harmonic continuation of axially symmetric potentials in E^3. **80j:31009**

Mizuta, Yoshihiro Fine differentiability of Riesz potentials. **80a:31004**

Nayar, B. M. Induced potential problem in three dimensions. II. Properties of the adjoint kernel. **80b:31004**

Rippon, P. J. A generalisation of Widman's theorem on comparison domains for harmonic measures. **80m:31007**

Siewert, Erdmute *See* **Dümmel, Siegfried, 80l:31004**

Waldvogel, Jörg The Newtonian potential of homogeneous polyhedra. (German summary) **80l:31005**

Watson, N. A. Thermal capacity. **80b:31005**

Secondary classifications:

Adams, David R. L^p-capacitary integrals with some applications. **(80j:46050)**

Andreian Cazacu, Cabiria Some problems in quasiconformality. **(80m:30017)**

Borderies, N. Mutual gravitational potential of N solid bodies. **(80c:70005)**

Čeredničenko, V. G. Determination of the density of a body from the given potential of an elliptic equation. (Russian) **(80c:35097)**
Dellacherie, Claude Théorie unifiée des capacités et des ensembles analytiques. **(80c:28001)**
Jonsson, A. The trace of potentials on general sets. **(80i:46029)**

31B20 Boundary value and inverse problems

Fabes, E. B. (*with* Jodeit, M., Jr.; Rivière, Nestor M.) Potential techniques for boundary value problems on C^1-domains. **80b:31006**
Genev, V. N. On the applicability of harmonic polynomials in the solution of a class of boundary value problems of a plane elasticity problem. (Bulgarian. Russian and French summaries) **80a:31005**
Jodeit, M., Jr. *See* **Fabes, E. B.; et al., 80b:31006**
Martensen, E. On geometric inequalities in potential theory. (Russian summary) **80a:31006**
Rivière, Nestor M. *See* **Fabes, E. B.; et al., 80b:31006**
Wu, Jang Mei G. Comparisons of kernel functions, boundary Harnack principle and relative Fatou theorem on Lipschitz domains. (French summary) **80g:31005**

Secondary classifications:

Anger, Gottfried (*with* Czerner, Regine) Solution of an inverse problem for the heat equation by methods of modern potential theory. **(80i:35176)**
Brossard, Jean Comportement des fonctions biharmoniques là où l'intégrale d'aire est finie. (English summary) **(80d:32013)**
Czerner, Regine *See* **Anger, Gottfried, (80i:35176)**
Dümmel, Siegfried Notwendige und hinreichende Bedingungen für die Darstellbarkeit von harmonischen Funktionen in Form von Potentialen. **(80m:31005)**
Frydrych, Zdzisław On the Orlicz space and Dirichlet problem for m-dimensional sphere. **(80d:46050)**
Glasko, V. B. (*with* Strahov, V. N.) The uniqueness problem in some inverse problems of geophysics. (Russian) **(80d:86003)**
Isakov, B. M. The uniqueness of the solution to the inverse problem of potential theory. (Russian) **(80f:35122)**
Januškauskas, Algimantas Boundary value problems for a holomorphic vector. (Russian) **(80a:35042)**
★Аналитическая теория эллиптических уравнений. (Russian) [The analytic theory of elliptic equations] **(80k:35041)**
Kapitonov, B. V. Potential theory for an equation of small oscillations of a revolving fluid. (Russian) **(80h:35115)**
Kress, Rainer The treatment of a Neumann boundary value problem for force-free fields by an integral equation method. **(80c:35088)**
Maz'ja, V. G. Behaviour of solutions to the Dirichlet problem for the biharmonic operator at a boundary point. **(80e:35026)**
Megrabov, A. G. On the determination of a set of point sources. (Russian) **(80c:78017)**
Stoker, J. J. Uniqueness theorems for some open and closed surfaces in three-space. **(80g:53047)**
Strahov, V. N. *See* **Glasko, V. B., (80d:86003)**

31B25 Boundary behavior

Brossard, Jean Comportement "non-tangentiel" et comportement "brownien" des fonctions harmoniques dans un demi-espace. Démonstration probabiliste d'un théorème de Calderon et Stein. **80j:31010**
Rippon, P. J. On the boundary behaviour of Green potentials. **80e:31003**

Secondary classifications:

Dahlberg, Björn E. J. Harmonic functions in Lipschitz domains. **(80c:31002)**
Kapanadze, Dž. V. The regularity of a point for the Dirichlet problem and the fine topology. (Russian) **(80d:35044)**
Korányi, Adam A survey of harmonic functions on symmetric spaces. **(80k:43012)**

31B30 Biharmonic and polyharmonic equations and functions

Brossard, Jean Comportement des fonctions biharmoniques au voisinage des points de la frontière distinguée où l'intégrale d'aire est finie. (English summary) **80a:31007**
Clasen, Ute (*with* Wildenhain, Günther) Approximation durch biharmonische Potentiale. **80b:31007**
Fichera, Gaetano Mean value theorems and majorization formulas for biharmonic functions. (Italian) **80j:31011**
Muitenko, V. S. Fundamental solution of a biharmonic equation in a Riemann space. (Russian) **80a:31008**
Okada, Masami Intégrales de Lusin-Calderón pour les fonctions "multiharmoniques" définies sur les "multiboules". (English summary) **80i:31006**
Snyder, Herbert H. A general solution of Whittaker's type for the biharmonic equation in three variables. **80g:31006**
Wildenhain, Günther *See* **Clasen, Ute, 80b:31007**

Secondary classifications:

Albinus, Günter Lösung des Dirichletschen Problems für die polyharmonische Gleichung in dickwandigen Hohlkugeln beliebiger Dimension. **(80i:35030)**
Díaz, J. B. (*with* Ram, R. B.) A reflection principle for a fourth-order partial differential equation which is related to the biharmonic equation. **(80k:35031)**
Gundy, R. F. (*with* Stein, Elias M.) H^p theory for the poly-disc. **(80j:32012)**
Ram, R. B. *See* **Díaz, J. B., (80k:35031)**
Rektorys, Karel The method of least squares on the boundary and very weak solutions of the first biharmonic problem. **(80h:73022)**
Schaefer, Philip W. (*with* Walter, Wolfgang) On pointwise estimates for metaharmonic functions. **(80f:35050)**
Stein, Elias M. *See* **Gundy, R. F., (80j:32012)**
Walter, Wolfgang *See* **Schaefer, Philip W., (80f:35050)**

31B35 Connections with differential equations

Secondary classifications:

Gabov, S. A. (*with* Vabiščevič, P. N.) Angular potential for a divergence elliptic operator. (Russian) **(80f:35060)**
Schulze, B.-W. On the mean value distributions associated with higher order elliptic equations. **(80m:35018)**
Vabiščevič, P. N. *See* **Gabov, S. A., (80f:35060)**

31B99 None of the above, but in this section

Dahlberg, Björn E. J. An algebra of functions. **80i:31007**
Frischbier, R. Die den $(x+iy)^\alpha \ln(x+iy)$ entsprechenden Integrale zur räumlichen Potentialgleichung. **80d:31005**
McCoy, Peter A. Extremal properties of real biaxially symmetric potentials in $E^{2(\alpha+\beta+2)}$. **80c:31004**
Ohtsuka, Makoto Differentiability and boundary limits of Newtonian potentials. **80j:31012**

Secondary classifications:

Hedberg, Lars Inge Approximation in L^p by analytic and harmonic functions. **(80j:46046)**
Itô, Masayuki Sur les noyaux de convolution conditionnellement sous-médians. II. **(80i:31008)**
Karr, Alan F. (*with* Pittenger, Arthur O.) An inverse balayage problem for Brownian motion. **(80b:60106)**
Liu, Ming Chit The Green function of convex, star-shaped domains. **(80h:35051)**
Pittenger, Arthur O. *See* **Karr, Alan F., (80b:60106)**
Roth, Jean-Pierre Les opérateurs elliptiques comme générateurs infinitésimaux de semi-groupes de Feller. **(80g:47052)**

31Cxx Other generalizations

31C05 Harmonic, subharmonic, superharmonic functions

Berg, Christian On the existence of condenser potentials. **80h:31003**
Lumer, Gunter Principe du maximum et équations d'évolution dans L^2. **80h:31004**

Secondary classifications:

Bauer, Heinz Halbgruppen und Resolventen in der Potentialtheorie. **(80m:31012)**
Fuglede, Bent Harmonic morphisms between Riemannian manifolds. (French summary) **(80h:58023)**
Kumagai, Donna Subharmonic functions and uniform algebras. **(80k:46055)**
Miller, Sanford S. (*with* Mocanu, Petru T.) Second order differential inequalities in the complex plane. **(80m:34006)**
Mocanu, Petru T. *See* **Miller, Sanford S., (80m:34006)**
Wu, H. An elementary method in the study of nonnegative curvature. **(80c:53054)**
Yau, Shing Tung Harmonic maps between Riemannian manifolds. **(80g:58025)**

31C10 Pluriharmonic and plurisubharmonic functions [See also 32F05.]

Gaveau, Bernard Méthode de contrôle optimal en analyse complexe ou réelle. III. Diffusion des fonctions plurisousharmoniques ou convexes. **80h:31005**
Kiselman, Christer O. Plurisubharmonic functions and plurisubharmonic topologies. **80k:31005**

Secondary classifications:

Bedford, Eric (*with* Fornaess, John Erik) Counterexamples to regularity for the complex Monge-Ampère equation. **(80c:32017)**
(*with* Taylor, B. A.) The Dirichlet problem for an equation of complex Monge-Ampère type. **(80j:32029)**
Forelli, Frank Some extreme rays of the positive pluriharmonic functions. **(80b:32017)**
Fornaess, John Erik *See* **Bedford, Eric, (80c:32017)**
Kolaski, Clinton Measures whose integral transforms are pluriharmonic. **(80k:32006)**
Taylor, B. A. *See* **Bedford, Eric, (80j:32029)**

31C12 Potential theory on Riemannian manifolds [See also 53C20; for Hodge theory, see 58A14.]

Nakai, Mitsuru (*with* Sario, Leo) A strict inclusion related to biharmonic Green's functions of clamped and simply supported bodies. **80c:31005**
Sario, Leo *See* **Nakai, Mitsuru, 80c:31005**

Secondary classifications:

Eells, James Minimal graphs. **(80i:58023)**
Ishihara, Tôru A mapping of Riemannian manifolds which preserves harmonic functions. **(80k:58045)**
Jäger, Willi (*with* Kaul, Helmut) Uniqueness and stability of harmonic maps and their Jacobi fields. **(80j:58030)**
(*with* Kaul, Helmut) Uniqueness of harmonic mappings and of solutions of elliptic equations on Riemannian manifolds. **(80d:58021)**
Kaul, Helmut *See* **Jäger, Willi, (80d:58021)** *and* **Jäger, Willi, (80j:58030)**
Lemaire, Luc Applications harmoniques de surfaces riemanniennes. **(80h:58024)**

Siu, Yum Tong Complex-analyticity of harmonic maps and strong rigidity of compact Kähler manifolds. **(80j:58031)**
Sunada, Toshikazu Rigidity of certain harmonic mappings. **(80f:58021)**

31C15 Potentials and capacities

Berg, Christian Principes duaux en théorie du potentiel. **80f:31002**
Itô, Masayuki Sur les noyaux de convolution conditionnellement sous-médians. II. **80i:31008**
Mokobodzki, Gabriel Ensembles compacts de fonctions fortement surmédianes. **80j:31013**
Ninomiya, Nobuyuki On the kernel of positive definite type. **80m:31008**

Secondary classifications:

Hedberg, Lars Inge Two approximation problems in function spaces. **(80c:46042)**
Mastrangelo-Dehen, Michèle Propriété de Lindeberg sur les ouverts fins. (English summary) **(80k:60101)**
Znamenskiĭ, V. A. The stability of the transfinite diameter for a compact set in $\mathbf{C}^n$. (Russian) **(80j:32028)**

31C20 Discrete potential theory and numerical methods

Secondary classifications:

Berzsenyi, George Methods for constructing linear difference operators which simulate analyticity. **(80a:30057)**
Harman, C. J. Discrete geometric function theory. I. **(80a:30058)**

31C25 Dirichlet spaces

Kuramochi, Zenjiro (*with* Nagasaka, Yukio) On the Dirichlet problem for unbounded boundary functions. **80j:31014**
Nagasaka, Yukio *See* **Kuramochi, Zenjiro, 80j:31014**

Secondary classifications:

Boboc, N. (*with* Bucur, Gh.; Cornea, Aurel) Hilbertian and lattice theoretical methods in potential theory. **(80m:31013)**
Bucur, Gh. *See* **Boboc, N.; et al., (80m:31013)**
Cornea, Aurel *See* **Boboc, N.; et al., (80m:31013)**

31C99 None of the above, but in this section

Berg, Christian Hunt convolution kernels which are continuous singular with respect to Haar measure. **80j:31015**
Hirsch, Francis Principes du maximum pour les noyaux de convolution. **80m:31009**
Nakai, Mitsuru (*with* Sario, Leo) Existence of negative quasiharmonic functions. (Russian summary) **80e:31004**
Sario, Leo *See* **Nakai, Mitsuru, 80e:31004**
Svanadze, M. Ž. Potential type integrals on infinite manifolds. (Russian. Georgian and English summaries) **80k:31006**

Secondary classifications:

Berg, Christian (*with* Forst, Gunnar) Infinitely divisible probability measures and potential kernels. **(80h:60025)**
Forst, Gunnar *See* **Berg, Christian, (80h:60025)**
Watatani, Yasuo Kernels, potentials and complete positivity. **(80j:46099)**

31D05 Axiomatic potential theory

Ancona, Alano Principe de Harnack à la frontière et théorème de Fatou pour un opérateur elliptique dans un domaine lipschitzien. (English summary) **80d:31006**
Arsove, Maynard (*with* Leutwiler, Heinz) Pseudo projections and balayage in algebraic potential theory. **80m:31010**
Bauer, Heinz Elliptische harmonische Strukturen. **80m:31011**
Halbgruppen und Resolventen in der Potentialtheorie. **80m:31012**
Boboc, N. (*with* Bucur, Gh.; Cornea, Aurel) Hilbertian and lattice theoretical methods in potential theory. **80m:31013**
(*with* Bucur, Gh.; Cornea, Aurel) Natural topologies on H-cones. Weak completeness. **80i:31009**
Boukricha, Abderrahman (*with* Hueber, Hermann) The Poisson space ${}^cP_x$ for $\Delta u = cu$ with rotation-free c. **80m:31014**
Bouleau, Nicolas Semi-groupe triangulaire associé à un espace biharmonique. (English summary) **80i:31010**
Bucur, Gh. *See* **Boboc, N.; et al., 80i:31009** *and* **Boboc, N.; et al., 80m:31013**
Čermáková, Eva The insertion of regular sets in potential theory. (Czech summary) **80a:31009**
Cornea, Aurel *See* **Boboc, N.; et al., 80i:31009** *and* **Boboc, N.; et al., 80m:31013**
Fuglede, Bent Invariant characterization of the fine topology in potential theory. **80k:31007**
Hansen, W. The Dirichlet problem. **80j:31016**
Hueber, Hermann *See* **Boukricha, Abderrahman, 80m:31014**
Hyvönen, Jaakko On the harmonic continuation of bounded harmonic functions. **80k:31008**
Laine, Ilpo Full-hyperharmonic structures on harmonic spaces. I. **80g:31007a**
Full-hyperharmonic structures on harmonic spaces. II. **80g:31007b**
Leutwiler, Heinz *See* **Arsove, Maynard, 80m:31010**
Lukeš, Jaroslav (*with* Netuka, Ivan) What is the right solution of the Dirichlet problem? **80m:31015**
Mokobodzki, Gabriel Espaces réticulés et algèbre de fonctions stables par composition avec les fonctions C^2. **80m:31016**
Netuka, Ivan *See* **Lukeš, Jaroslav, 80m:31015**
Nguyen-Xuan-Loc Sur la théorie des fonctions finement holomorphes. (English summary) **80c:31006**
Oja, Kirsti On cluster sets of harmonic morphisms between harmonic spaces. **80k:31009**

Secondary classifications:

Bendikov, A. D. Harmonic structures that are generated by a thermal Wiener process on a group. (Russian) **(80e:60092)**
(Bismut, Jean-Michel) *See* **Mokobodzki, Gabriel, (80i:60106)**
Ghoussoub, Nassif (*with* Talagrand, Michel) Convergence faible des potentiels de Doob vectoriels. (English summary) **(80b:60100)**
Kesel'man, D. G. Several properties of Choquet simplexes. (Russian) **(80m:46010)**
Mokobodzki, Gabriel Sur l'opérateur de réduite. Remarques sur un travail de J.-M. Bismut: "Sur un problème de Dynkin" [Z. Wahrsch. Verw. Gebiete 39 (1977), no. 1, 31–53; MR 56 #2576]. **(80i:60106)**
Talagrand, Michel *See* **Ghoussoub, Nassif, (80b:60100)**

32-XX SEVERAL COMPLEX VARIABLES AND ANALYTIC SPACES {For infinite-dimensional holomorphy, see also 46G20, 58B12.}

32-01 Elementary exposition, textbooks

Chern, Shiing Shen ★Complex manifolds without potential theory. **80f:32001**
Grauert, Hans (*with* Remmert, R.) ★Theorie der Steinschen Räume. **80j:32001**
Remmert, R. *See* **Grauert, Hans, 80j:32001**

Secondary classifications:

Kerzman, Norberto Several complex variables, differential equations and integral representations. (Spanish. English summary) **(80h:32007)**
Vladimirov, V. S. ★Обобщенные функции в математической физике. (Russian) [Generalized functions in mathematical physics] **(80j:46062a)**

32-02 Advanced exposition (research surveys, monographs, etc.)

Čirka, E. M. Analytic continuation of functions of several variables and its applications. (Russian) **80b:32001**
Wells, R. O., Jr. Complex manifolds and mathematical physics. **80h:32001**

Secondary classifications:

Grauert, Hans (*with* Remmert, R.) ★Theorie der Steinschen Räume. **(80j:32001)**
Narasimhan, Raghavan The Levi problem and pseudo-convex domains: a survey. **(80a:32016)**
Remmert, R. *See* **Grauert, Hans, (80j:32001)**

32-03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

(Fefferman, Charles Louis) *See* **Moser, Jürgen, (80a:01037)**
(Hirschowitz, André) *See* **Martineau, André, (80h:01038)**
Martineau, André ★Oeuvres de André Martineau. **(80h:01038)**
Moser, Jürgen Fields medals. III. A broad attack on analysis problems. **(80a:01037)**
NISHINO, T. In memory of Prof. Kiyosi Oka. (Japanese) **(80e:01034)**
(Oka, Kiyosi) *See* **NISHINO, T., (80e:01034)**
(Schwartz, Laurent) *See* **Martineau, André, (80h:01038)**
Biography:
Fefferman, Charles Louis *See* **Moser, Jürgen, (80a:01037)**
Martineau, André *See* **Martineau, André, (80h:01038)**
Obituary:
Oka, Kiyosi *See* **NISHINO, T., (80e:01034)**

32-04 Explicit machine computation and programs (not the theory of computation or programming)

32-06 Proceedings, conferences, etc.

(Hervier, Y.) *See* **Variétés analytiques compactes, 80a:32002**
(Hirschowitz, André) *See* **Variétés analytiques compactes, 80a:32002**
(Lelong, Pierre) *See* **Séminaire: Pierre Lelong-Henri Skoda (Analyse), 80a:32001**
(Norguet, François) *See* **Fonctions de plusieurs variables complexes, 80g:32001**
(Skoda, Henri) *See* **Séminaire: Pierre Lelong-Henri Skoda (Analyse), 80a:32001**
(Sundararaman, D.) *See* **Hyperbolic complex analysis, 80k:32001**
Analysis *See* **Séminaire: Pierre Lelong-Henri Skoda (Analyse), 80a:32001**
Analytic varieties *See* **Variétés analytiques compactes, 80a:32002**
Colloque:
Variétés Analytiques Compactes *See* **Variétés analytiques compactes, 80a:32002**
Compact analytic varieties *See* **Variétés analytiques compactes, 80a:32002**
Complex analysis *See* **Hyperbolic complex analysis, 80k:32001**
Fonctions de plusieurs variables complexes ★Fonctions de plusieurs variables complexes. III. **80g:32001**
Hyperbolic complex analysis ★Hyperbolic complex analysis. **80k:32001**
Madras *See* **Hyperbolic complex analysis, 80k:32001**
Nice *See* **Variétés analytiques compactes, 80a:32002**

Séminaire:
Pierre Lelong-Henri Skoda (Analyse) ★Séminaire Pierre Lelong-Henri Skoda (Analyse). Année 1976/77. **80a:32001**
François Norguet *See* **Fonctions de plusieurs variables complexes, 80g:32001**
Seminar:
All India, Hyperbolic Complex Analysis *See* **Hyperbolic complex analysis, 80k:32001**
Several complex variables *See* **Fonctions de plusieurs variables complexes, 80g:32001**
Variétés analytiques compactes ★Variétés analytiques compactes. **80a:32002**

Secondary classifications:

(Andreian Cazacu, Cabiria) *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
(Barroso, Jorge Alberto) *See* **Advances in holomorphy, (80a:46001)**
(Carmona, Jacques) *See* **Non-commutative harmonic analysis, (80g:22001)**
(Cornea, Aurel) *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
(Fourman, Michael P.) *See* **Applications of sheaves, (80j:18001)**
(Jurchescu, Martin) *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
(Krée, Paul) *See* **Séminaire: Paul Krée, (80j:46001)**
(Mitropol'skiĭ, Ju. O.) *See* **Complex analysis and manifolds, (80d:00004)**
(Mulvey, Christopher J.) *See* **Applications of sheaves, (80j:18001)**
(Scott, Dana S.) *See* **Applications of sheaves, (80j:18001)**
(Suciu, Ion) *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
(Trohimčuk, Ju. Ju.) *See* **Complex analysis and manifolds, (80d:00004)**
(Vergne, Michèle) *See* **Non-commutative harmonic analysis, (80g:22001)**
Advances in holomorphy ★Advances in holomorphy. **(80a:46001)**
Algebraic analysis of quantum field theory ★Algebraic analysis of quantum field theory. (Japanese) **(80h:81001)**
Applications of sheaves ★Applications of sheaves. **(80j:18001)**
Bucharest *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
Colloquium:
Non-Commutative Harmonic Analysis *See* **Non-commutative harmonic analysis, (80g:22001)**
Complex analysis *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
Complex analysis and manifolds ★Комплексный анализ и многообразия. (Russian) [Complex analysis and manifolds] **(80d:00004)**
Differential equations in the complex domain ★Differential equations in the complex domain. (Japanese) **(80f:34002)**
Durham *See* **Applications of sheaves, (80j:18001)**
Harmonic analysis *See* **Non-commutative harmonic analysis, (80g:22001)**
Holomorphic curves *See* **Meromorphic functions and value-distributions of holomorphic curves, (80f:30017)**
Holomorphy *See* **Advances in holomorphy, (80a:46001)**
Kyoto *See* **Meromorphic functions and value-distributions of holomorphic curves, (80f:30017)** *and* **Differential equations in the complex domain, (80f:34002)**
Manifolds *See* **Complex analysis and manifolds, (80d:00004)**
Marseille-Luminy *See* **Non-commutative harmonic analysis, (80g:22001)**
Meromorphic functions and value-distributions of holomorphic curves ★Value distribution of holomorphic curves and meromorphic functions. (Japanese) **(80f:30017)**
Non-commutative harmonic analysis ★Noncommutative harmonic analysis. **(80g:22001)**
Partial differential equations *See* **Séminaire: Paul Krée, (80j:46001)**
Quantum field theory *See* **Algebraic analysis of quantum field theory, (80h:81001)**
Quasiconformal mappings *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
Rio de Janeiro *See* **Advances in holomorphy, (80a:46001)**
Romanian-Finnish Seminar on Complex Analysis ★Romanian-Finnish Seminar on Complex Analysis. **(80i:30002)**
Séminaire:
Paul Krée ★Séminaire Paul Krée 4e année: 1977–1978. Équations aux dérivées partielles en dimension infinie. **(80j:46001)**
Seminar:
Holomorphy *See* **Advances in holomorphy, (80a:46001)**
Romanian-Finnish, Complex Analysis *See* **Romanian-Finnish Seminar on Complex Analysis, (80i:30002)**
Sheaf theory *See* **Applications of sheaves, (80j:18001)**
Symposium:
Algebraic Analysis of Quantum Field Theory *See* **Algebraic analysis of quantum field theory, (80h:81001)**
Applications of Sheaf Theory to Logic, Algebra and Analysis *See* **Applications of sheaves, (80j:18001)**
Differential Equations in the Complex Domain *See* **Differential equations in the complex domain, (80f:34002)**
Meromorphic Functions and Value-Distributions of Holomorphic Curves *See* **Meromorphic functions and value-distributions of holomorphic curves, (80f:30017)**

32Axx Holomorphic functions of several complex variables

32A05 Power series, series of functions

Čulik, Ĭ. Ĭ. *See* **Kardaš, A. Ĭ.; et al., 80c:32001** *and* **Kardaš, A. Ĭ.; et al., 80f:32002**

Geĭe, F. Ĭ. The Newton diagram and its application to the study of the maximum term of a multiple Laurent series. I. (Russian) **80b:32002**

Jaunišunkas, Algimantas Properties of conjugate abscissas of convergence of double Dirichlet series. (Russian. Lithuanian and German summaries) **80h:32002**

Kardaš, A. Ĭ. (*with* Kostovs'kiĭ, O. M.; Čulik, Ĭ. Ĭ.) Properties of the Newton diagram and majorant for double Dirichlet series in the problem of the localization of zeros. (Russian. English summary) **80c:32001**
(*with* Kostovs'kiĭ, O. M.; Čulik, Ĭ. Ĭ.) Localization of the zeros of the double Dirichlet series. (Russian. English summary) **80f:32002**

Kostovs'kiĭ, O. M. *See* **Kardaš, A. Ĭ.; et al., 80c:32001** *and* **Kardaš, A. Ĭ.; et al., 80f:32002**

Schwalger, Jens Eine Formel von E. Jabotinsky in der Theorie der analytischen Iterationen. **80g:32002**

Secondary classifications:

Basu, Sankar *See* **Bose, N. K., (80f:93075)**

Bose, N. K. (*with* Basu, Sankar) Tests for polynomial zeros on a polydisc distinguished boundary. **(80f:93075)**

Gavrilova, R. M. The connection between different growth characteristics of entire functions of two complex variables that can be represented by Dirichlet series. (Russian) **(80e:32003)**

Heinze, Joachim Die Automorphismen und die Invarianzgruppe der Algebra der konvergenten Potenzreihen eines Banachraumes. **(80m:17005)**

32A07 Special domains (Reinhardt, Hartogs, tube domains, etc.)

Braun, Robert (*with* Kaup, Wilhelm; Upmeier, Harald) On the automorphisms of circular and Reinhardt domains in complex Banach spaces. **80g:32003**

Carmichael, Richard D. Strong boundedness of analytic functions in tubes. **80j:32002**

Kaup, Wilhelm *See* **Braun, Robert; et al., 80g:32003**

Kazlow, M. CR functions and tube manifolds. **80m:32001**

Kodama, Akio A remark on bounded Reinhardt domains. **80d:32001**

Upmeier, Harald *See* **Braun, Robert; et al., 80g:32003**

Vladimirov, V. S. Estimation of the boundary values of the growth of nonnegative pluriharmonic functions in a tube domain over a skew cone. (Russian) **80b:32003**

Watanabe, Toshihiro On the spectral representation of holomorphic functions on some domain. **80k:32002**

32A10 Holomorphic functions

Bavrin, I. I. The Schur and Carathéodory classes of functions in the case of several complex variables, and extremal questions in these classes. (Russian) **80b:32004**
On extremal questions in the classes Q_D, M_D, N_D, R_D. (Russian. Georgian and English summaries) **80i:32001**

Bondar, A. V. A higher-dimensional analogue of a theorem of Besicovitch. (Russian) **80i:32003**
Multidimensional generalization of D. E. Men'šov's theorem. (Russian) **80e:32001**

Demailly, Jean-Pierre Fonctions holomorphes bornées ou à croissance polynomiale sur la courbe $e^x + e^y = 1$. (English summary) **80e:32002**

Divarieĭvili, I. A. A class of analytic functions in the unit polydisc. (Russian. Georgian and English summaries) **80m:32002**

Leĭnartas, E. K. Factorization of rational functions of several variables into partial fractions. (Russian) **80c:32002**

Mihaĭlov, L. G. Conditions for compatibility of a generalized Cauchy-Riemann system with many variables. (Russian. Tajiki summary) **80h:32003**
Varieties of solutions of a generalized Cauchy-Riemann system with several variables. (Russian. Tajiki summary) **80h:32004**

Ronkin, L. I. The Liouville theorems for functions that are holomorphic on the set of zeros of a polynomial. (Russian) **80i:32002**

Rudin, Walter The fixed-point sets of some holomorphic maps. **80d:32002**

Štečhorskiĭ, A. I. Contour-solid theorems for holomorphic functions in $\mathbf{C}^n$. (Russian) **80i:32004**

Secondary classifications:

Bessmertnyĭ, M. F. Impedances of electrical circuits of Ming Nai-Ta's class as analytic functions of two complex variables. I. (Russian) **(80k:94034a)**
Impedances of electrical circuits of Ming-Nai-Ta's class as analytic functions of two complex variables. II. (Russian) **(80k:94034b)**

Bucher, W. Kontinuierliche Iterationen formal-biholomorpher Abbildungen. **(80j:22005)**

Colombeau, Jean-François (*with* Meise, Reinhold) Strong nuclearity in spaces of holomorphic mappings. **(80j:46072)**

Forelli, Frank Some extreme rays of the positive pluriharmonic functions. **(80b:32017)**

Meise, Reinhold *See* **Colombeau, Jean-François, (80j:46072)**

Rubel, Lee A. (*with* Timoney, Richard M.) An extremal property of the Bloch space. **(80h:30034)**

Timoney, Richard M. *See* **Rubel, Lee A., (80h:30034)**

32A15 Entire functions

Agranovič, P. Z. Functions of several variables with completely regular growth. (Russian) **80h:32005**

Armitage, D. H. On harmonic functions which take integer values on integer lattices. **80g:32004**

Gavrilova, R. M. The connection between different growth characteristics of entire functions of two complex variables that can be represented by Dirichlet series. (Russian) **80e:32003**

Ginzburg, B. N. Characteristic properties of certain hypersurfaces of entire functions of several variables. (Russian) **80g:32005**

Gopala Krishna, J. (*with* Nagaraja Rao, I. H.) Generalised inverse and probability techniques and some fundamental growth theorems in $\mathbf{C}^k$. **80f:32003**

Jain, Daulat R. *See* **Saxena, R. K., 80i:32009**

Kar, A. K. (*with* Lahiri, B. K.) On the coefficients of entire series of several complex variables. **80i:32007**

Lahiri, B. K. *See* **Kar, A. K., 80i:32007**

Magerramov, È. H. Extremal problems in definite classes of entire functions of two variables. (Russian) **80i:32005**

Nagaraja Rao, I. H. *See* **Gopala Krishna, J., 80f:32003**

Napalkov, V. V. Convolution equations in multidimensional spaces. (Russian) **80m:32003**

Rubel, Lee A. (*with* Squires, W. A.; Taylor, B. A.) Irreducibility of certain entire functions with applications to harmonic analysis. **80d:32003**

Saxena, R. K. (*with* Jain, Daulat R.) On the space of entire functions of finite growth over non-Archimedean fields. I, II. **80i:32009**

Sebbar, Ahmed Prolongement des solutions d'un opérateur différentiel d'ordre infini. (English summary) **80k:32003**

Squires, W. A. *See* **Rubel, Lee A.; et al., 80d:32003**

Taylor, B. A. *See* **Rubel, Lee A.; et al., 80d:32003**

Yamaguchi, Hiroshi Fonctions entières paraboliques dans $\mathbb{C}^2$. **80g:32006**

Secondary classifications:

Abuabara, Teófilo A version of the Paley-Wiener-Schwartz theorem in infinite dimensions. **(80g:46040a)**

Ansemil, J. M. Topological duality on the function space $\mathcal{H}(\mathbb{C}^N)$. **(80d:46044)**

Ginzburg, B. N. (*with* Seryh, N. D.) Algebraic zero surfaces of entire characteristic functions of multivariate-dimensional probabilistic distributions. (Russian) **(80d:60022)**

Gramain, François Fonctions entières arithmétiques. **(80f:10046)**

(de Jager, Eduard M.) *See* **de Roever, J. W., (80h:46058)**

Jain, Daulat R. *See* **Jain, Pawan Kumar, (80d:46045)**

Jain, Pawan Kumar (*with* Jain, Daulat R.) Certain classes of linear functionals on the space of entire functions over non-Archimedean fields. **(80d:46045)**

de Roever, J. W. ★Complex Fourier transformation and analytic functionals with unbounded carriers. **(80h:46058)**

Seryh, N. D. *See* **Ginzburg, B. N., (80d:60022)**

Zelberger, Doron Solutions of exponential growth to systems of partial differential equations. **(80h:35030)**

32A17 Normal families

32A20 Meromorphic functions

Kazarjan, M. V. Separately meromorphic functions. (Russian. Armenian summary) **80j:32003**

Secondary classifications:

Choodnovsky, Gregory V. Values of meromorphic functions of order 2. (French summary) **(80c:10038)**

Reyssat, Éric Travaux récents de G. V. Čudnovskij. **(80m:10025)**

32A22 Nevanlinna theory: growth estimates {For geometric theory, see 32H25, 32H30.}

Dautov, Š. A. (*with* Henkin, G. M.) Zeros of holomorphic functions of finite order and weighted estimates for the solutions of the $\bar\partial$-equation. (Russian) **80b:32005**

Henkin, G. M. *See* **Dautov, Š. A., 80b:32005**

Molzon, Robert E. Sets omitted by equidimensional holomorphic mappings. **80m:32004**

Mori, Seiki Holomorphic curves with maximal deficiency sum. **80h:32006**

Secondary classifications:

Krytov, A. V. Magnitudes of deviations of entire curves with linearly dependent components. (Russian) **(80m:30032)**

Growth and distribution of the values of p-dimensional entire curves with linearly dependent components. (Russian) **(80m:30033)**

Defects of entire curves of finite lower order. (Russian) **(80m:30034)**

Mori, Seiki The deficiencies and the order of holomorphic mappings of $\mathbb{C}^n$ into a compact complex manifold. **(80m:32030)**

32A25 Integral representation

Airapetjan, R. A. Boundary properties of a Cauchy-Leray integral in piecewise smooth domains in $\mathbb{C}^n$. (Russian) **80k:32004**

Aizenberg, L. A. A generalized multidimensional logarithmic residue formula, integral representations of holomorphic functions of several complex variables and some of their applications. (Russian) **80i:32006**

de Bartolomeis, Paolo "Hardy-like" estimates for the $\bar\partial$-operator and scripture theorems for functions in $\mathcal{H}^p$ in strictly pseudoconvex domains. (Italian summary) **80j:32004**

Bavrin, I. I. The sharpness of estimates for the Schur, Carathéodory and Borel functions in the case of a hypersphere. (Russian. Georgian and English summaries) **80a:32003**

Integral representations in a class of multiply circular domains. (Russian. Georgian and English summaries) **80d:32004**

General integral representations in a class of bounded n-circular domains. (Russian. Georgian and English summaries) **80j:32005**

Coffman, Ronald (*with* Rochberg, Richard) Representation theorems for holomorphic and harmonic functions. **80j:32006**

Gazlev, A. Limit values of a Martinelli-Bochner integral. (Russian) **80i:32008**

Henkin, G. M. *See* **Petrosjan, A. L., 80j:32007**

Jarnuhamedov, Š. A Martinelli-Bochner integral formula and the Phragmen-Lindelöf principle. (Russian) **80g:32007**

Kerzman, Norberto Several complex variables, differential equations and integral representations. (Spanish. English summary) **80h:32007**

Singular integrals in complex analysis. **80m:32005**

Lassalle, Michel Sur la transformation de Fourier-Laurent dans un groupe analytique complexe réductif. (English summary) **80b:32006**

Lupacciolu, Guido On the integral representation formulas of functions of several complex variables. (Italian. English summary) **80h:32009**

Oniani, G. A. Integral representations of analytic and 2-harmonic functions in a unique bicylinder. (Russian. Georgian and English summaries) **80m:32006**

Petrosjan, A. L. (*with* Henkin, G. M.) Solution with a uniform estimate of the $\bar\partial$-equation in a real nondegenerate Weil polyhedron. (Russian. Armenian and English summaries) **80j:32007**

Rochberg, Richard *See* **Coifman, Ronald, 80j:32006**

Romanov, A. V. Convergence of iterations of the Martinelli-Bochner operator, and the Cauchy-Riemann equation. (Russian) **80i:32012**

Spectral analysis of the Martinelli-Bochner operator for the ball in $\mathbb{C}^n$, and its applications. (Russian) **80i:32013**

Roos, Guy Formules intégrales pour les formes différentielles sur $\mathbb{C}^n$. II. **80h:32008**

Recollement universel de noyaux. **80i:32014**

Stanton, Nancy K. Integral representations and the complex Monge-Ampère equation in strictly convex domains. **80h:32010**

Secondary classifications:

Abuabara, Teófilo A version of the Paley-Wiener-Schwartz theorem in infinite dimensions. **(80g:46040a)**

Bergère, M. C. (*with* David, F.) Integral representation for the dimensionally regularized massive Feynman amplitude. **(80e:81028)**

Bukin, K. A. Asymptotic behaviour of the two-point Wightman function. (Russian. English summary) **(80f:81047)**

David, F. *See* **Bergère, M. C., (80e:81028)**

Džvaršeišvili, A. G. Boundary properties of a two-dimensional integral of Cauchy type. (Russian) **(80h:44004)**

Minčev, M. C. *See* **Todorov, I. T.; et al., (80f:81061)**

Pavlov, V. P. (*with* Polivanov, A. D.) Analytic structure of amplitude 3→3. **(80e:81015)**

Petkova, V. B. *See* **Todorov, I. T.; et al., (80f:81061)**

Polivanov, A. D. *See* **Pavlov, V. P., (80e:81015)**

Todorov, I. T. (*with* Minčev, M. C.; Petkova, V. B.) ★Conformal invariance in quantum field theory. **(80f:81061)**

Vasilescu, Florian-Horia Analytic functional calculus and Martinelli's formula. **(80m:47013)**

Zinov'ev, Ju. M. Nonunitary representations of $MH(2)$, the $ax+b$ group and the Laplace transform. (Russian. English summary) **(80g:46039)**

32A27 Local theory of residues {See also 32C30.}

Laurent-Thiébaut, Christine Une formule des résidus. (English summary) **80e:32004**

Mkrtčjan, E. S. A logarithmic residue formula in $\mathbb{C}^n$ and its application to the study of univalent mappings. (Russian. Armenian summary) **80h:32011**

Roos, Guy Cocycles de noyaux de Martinelli. **80h:32012**

Secondary classifications:

Aizenberg, L. A. A generalized multidimensional logarithmic residue formula, integral representations of holomorphic functions of several complex variables and some of their applications. (Russian) **(80i:32006)**

Coleff, Nicolas R. (*with* Herrera, Miguel E.) ★Les courants résiduels associés à une forme méromorphe. **(80j:32016)**

Herrera, Miguel E. *See* **Coleff, Nicolas R., (80j:32016)**

Hopkins, Glenn W. (*with* Lipman, Joseph) An elementary theory of Grothendieck's residue symbol. **(80j:14003)**

Lipman, Joseph *See* **Hopkins, Glenn W., (80j:14003)**

Romanov, A. V. Spectral analysis of the Martinelli-Bochner operator for the ball in $\mathbb{C}^n$, and its applications. (Russian) **(80i:32013)**

Roos, Guy Formules intégrales pour les formes différentielles sur $\mathbb{C}^n$. II. **(80h:32008)**

32A30 Other generalizations of function theory of one complex variable (should also be assigned at least one classification number from Section 30) {For functions of several hypercomplex variables, see 30G35.}

Černomaz, V. N. (*with* Ševčenko, V. I.) The problem of linear conjugation for a holomorphic vector in four-dimensional space. (Russian) **80a:32004**

Cvil', M. M. *See* **Kakičev, V. A., 80c:32003**

Dobrowolska, Krystyna (*with* Dziubiński, Izydor) On starlike and convex functions of many variables. **80a:32005**

Dziubiński, Izydor *See* **Dobrowolska, Krystyna, 80a:32005**

Kakičev, V. A. (*with* Cvil', M. M.) Approximation of analytic functions of two variables by partial sums of Laurent-Faber series. (Russian) **80c:32003**

Factorization and γ-factorization of functions belonging to a Wiener ring that are defined on the product of a circle and the compactified real line. (Russian) **80g:32008**

Lagvilava, È. T. Factorization of matrix-valued functions. (Russian. Georgian and English summaries) **80c:32004**

Le Hung Son Eindeutigkeitseigenschaft eines Fortsetzungssatzes für verallgemeinerte analytische Funktionen mehrerer komplexer Variabler. **80i:32018**

Verfahren zur Fortsetzung verallgemeinerter analytischer Funktionen mehrerer komplexer Variabler. **80i:32017**

Magomedov, G. A. (*with* Palamodov, V. P.) Generalized analytic functions of several variables. (Russian) **80c:32005**

Noverraz, Philippe Notions de domaine d'holomorphie dans les espaces de Banach complexes. **80g:32009**

Palamodov, V. P. *See* **Magomedov, G. A., 80c:32005**

Ševčenko, V. I. *See* **Černomaz, V. N., 80a:32004**

Secondary classifications:

Baizaev, S. Periodic solutions of a nonlinear generalized Cauchy-Riemann system. (Russian. Tajiki summary) **(80m:35004)**
Januškauskas, Algimantas ★Аналитическая теория эллиптических уравнений. (Russian) [The analytic theory of elliptic equations] **(80k:35041)**
Korányi, Adam (*with* Vági, Stephen) Rational inner functions on bounded symmetric domains. **(80h:32062)**
Laird, Philip G. Multidimensional Volterra integral equations of convolution type. **(80f:45006)**
Lomzina, T. B. Values for deviations of integral curves. (Russian) **(80m:30022)**
Laurent, Michel Transcendance de périodes d'intégrales elliptiques. (English summary) **(80d:10053)**
Lifanov, I. K. The Poincaré-Bertrand formula and singular integral equations with multiple integrals of Cauchy type. (Russian) **(80b:45006)**
Masser, D. W. Polynomial interpolation in several complex variables. **(80d:10054)**
McNabb, Alex (*with* Schumitzky, Alan) Factorization of Fredholm operators on analytic functions. **(80i:47023)**
Miller, Sanford S. (*with* Mocanu, Petru T.) Second order differential inequalities in the complex plane. **(80m:34006)**
Mocanu, Petru T. *See* **Miller, Sanford S., (80m:34006)**
Schumitzky, Alan *See* **McNabb, Alex, (80i:47023)**
Sparing, H.-D. Analytische Operatoren vektorieller Veränderlicher in komplexen und reellen Banach-Räumen. I. **(80d:46083)**
Vági, Stephen *See* **Korányi, Adam, (80h:32062)**

32A35 H^p-spaces [See also 32M15, 42B30, 43A85, 46J15.]

de Bartolomeis, Paolo Approximation theorems for H^p functions in strictly pseudoconvex domains of Stein manifolds. (Italian. English summary) **80j:32008**
Chang, Sun Yung A. Structure of some subalgebra of L^∞ of the torus. **80k:32005**
Carleson measure on the bi-disc. **80j:32009**
Chee, P. S. A uniqueness set for all $H^p(B_n)$ with $p>0$. **80j:32010**
Cumenge, Anne Extension dans des classes de Hardy de fonctions holomorphes. (English summary) **80i:32019**
Détraz, Jacqueline Restriction à la diagonale des classes de Hardy du bidisque. (English summary) **80a:32006**
Garnett, John B. (*with* Latter, Robert H.) The atomic decomposition for Hardy spaces in several complex variables. **80j:32011**
Gundy, R. F. (*with* Stein, Elias M.) H^p theory for the poly-disc. **80j:32012**
Jones, Peter W. A complete bounded complex submanifold of $\mathbf{C}^3$. **80i:32011**
Kolaski, Clinton Measures whose integral transforms are pluriharmonic. **80k:32006**
Kon, S. H. Inner functions and the maximal ideal space of $L^\infty(T^n)$. **80c:32006**
Latter, Robert H. *See* **Garnett, John B., 80j:32011**
Oberlin, Daniel M. Two multiplier theorems for $H^1(U^2)$. **80h:32013**
Saka, Kōichi A generalization of Cauchy-Riemann equations on a Riemannian symmetric space and the H^p space theory. **80k:32007**
Stein, Elias M. *See* **Gundy, R. F., 80j:32012**
Weyland, Nicholas A note on the zeros of H^p functions. **80h:32014**
Zarantonello, Sergio E. The extension of H^p-functions from certain hypersurfaces of a polydisc. **80i:32010**

Secondary classifications:

Gaveau, Bernard Valeurs frontières des fonctions harmoniques et holomorphes. Cas du disque et du bidisque. (English summary) **(80i:32020)**
Jewell, Nicholas P. (*with* Krantz, Steven George) Toeplitz operators and related function algebras on certain pseudoconvex domains. **(80h:47033)**
Kon, S. H. Inner functions and the maximal ideal space of $H^\infty(U^n)$. **(80e:46037b)**
Inner functions on the polydisc. **(80e:46037a)**
Korányi, Adam A survey of harmonic functions on symmetric spaces. **(80k:43012)**
Krantz, Steven George *See* **Jewell, Nicholas P., (80h:47033)**
McDonald, Gerard The maximal ideal space of $H^\infty + C$ on the ball in $\mathbf{C}^n$. **(80f:46055)**
Toeplitz operators on the ball with piecewise continuous symbol. **(80j:47042)**
(*with* Sundberg, C.) Toeplitz operators on the disc. **(80h:47034)**
Stein, Elias M. Some problems in harmonic analysis. **(80m:42027)**
Sundberg, C. *See* **McDonald, Gerard, (80h:47034)**

32A40 Boundary behavior

Ahern, Patrick (*with* Schneider, Robert) A smoothing property of the Henkin and Szegő projections. **80i:32015**
Gaveau, Bernard Valeurs frontières des fonctions harmoniques et holomorphes. Cas du disque et du bidisque. (English summary) **80i:32020**
Hakim, Monique (*with* Sibony, Nessim) Ensembles pics dans des domaines strictement pseudo-convexes. **80c:32007**
Kakičev, V. A. Analysis of the conditions of solvability for a Riemann problem of the second kind. (Russian) **80d:32005**
Lewy, Hans On the relation between analyticity in one and in several variables. (Russian summary) **80d:32006**
Li, Ta Chung Proper self-mappings of the Hartogs triangle. **80h:32015**
McCoy, T. L. Functions of unit modulus on boundary portions of domains with a certain circular symmetry. **80i:32022**
Nagel, Alexander Cauchy transforms of measures, and a characterization of smooth peak interpolation sets for the Ball algebra. **80b:32007**
Nishiwada, Kimimasa On local characterization of wave front sets in terms of boundary values of holomorphic functions. **80i:32023**
Pathak, Ram Shankar Analytic functions having distributional boundary values in W'-spaces. **80i:32021**
Polking, John C. (*with* Wells, R. O., Jr.) Boundary values of Dolbeault cohomology classes and a generalized Bochner-Hartogs theorem. **80h:32016**
Šafil, M. Naser Some boundary properties of holomorphic functions of several complex variables. (Russian) **80g:32010**
Schneider, Robert *See* **Ahern, Patrick, 80i:32015**
Sibony, Nessim *See* **Hakim, Monique, 80c:32007**
Stoll, Wilhelm Boundary values of holomorphic and meromorphic functions. **80g:32011**
Wells, R. O., Jr. *See* **Polking, John C., 80h:32016**

Secondary classifications:

Airapetjan, R. A. Boundary properties of a Cauchy-Leray integral in piecewise smooth domains in $\mathbf{C}^n$. (Russian) **(80k:32004)**
de Baere, W. Wightman functions for interacting spinor fields on a lightlike plane. (Italian and Russian summaries) **(80j:81047)**
Boutet de Monvel, Louis Convergence dans le domaine complexe des séries de fonctions propres. **(80i:35185)**
Bukin, K. A. Asymptotic behaviour of the two-point Wightman function. (Russian. English summary) **(80f:81047)**
Carmichael, Richard D. Strong boundedness of analytic functions in tubes. **(80j:32002)**
Ch'ên, Wu Yung Remarks on H^p spaces over bounded symmetric domains. **(80d:32031)**
Childress, C. L. (*with* Csordas, G. L.) The theory of cluster sets in the unit polydisc. **(80i:30049)**
(*with* Csordas, G. L.) One-sided cluster-set theory in a polydisc. **(80i:30050)**
Csordas, G. L. *See* **Childress, C. L., (80i:30049)** *and* **Childress, C. L., (80i:30050)**
Džvaršeĭšvili, A. G. Boundary properties of a two-dimensional integral of Cauchy type. (Russian) **(80h:44004)**
Gaziev, A. Limit values of a Martinelli-Bochner integral. (Russian) **(80i:32008)**
(de Jager, Eduard M.) *See* **de Roever, J. W., (80h:46058)**
Langenbruch, Michael Randverteilungen von Nullösungen hypoelliptischer Differentialgleichungen. (English summary) **(80d:46075)**
Lewis, John B. Eigenfunctions on symmetric spaces with distribution-valued boundary forms. **(80f:43020)**
(Pétrova, Irina) *See* **Vladimirov, V., (80k:46046)**
Raĭčinov, Ivan Linear operators defined in spaces of complex functions of many variables and commuting with the operators of integration. **(80i:47045)**
de Roever, J. W. ★Complex Fourier transformation and analytic functionals with unbounded carriers. **(80h:46058)**
Tsuno, Yoshimichi Holomorphic continuation of solutions of degenerate partial differential equations in two variables. **(80j:35004)**
Vladimirov, V. ★Distributions en physique mathématique. **(80k:46046)**
Yger, Alain Fonctions définies dans le plan et moyennes en tout point de leurs valeurs aux sommets de deux carrés. (English summary) **(80c:46049)**

32A45 Hyperfunctions [See also 46F15.]

Chou, Chin Ch'êng (*with* Marti, Jean-André) Un théorème d'unicité sur les hyperfonctions régulières par rapport à une des variables. (English summary) **80i:32024**
Marti, Jean-André *See* **Chou, Chin Ch'êng, 80i:32024**

Secondary classifications:

Aragona, Jorge Holomorphically significant properties of spaces of holomorphic germs. **(80h:46066)**
Kashiwara, Masaki Introduction to the theory of hyperfunctions. **(80m:58039)**
Keller, Klaus Analytic regularizations, finite part prescriptions and products of distributions. **(80k:46044)**
Kytmanov, A. M. The representation and product of distributions of several variables by means of harmonic functions. (Russian) **(80b:46048)**
Li, Bang He Non-standard analysis and multiplication of distributions. **(80e:46028)**
Mebkhout, Zoghman Cohomologie locale d'une hypersurface. **(80h:32023)**
Pathak, Ram Shankar Analytic functions having distributional boundary values in W'-spaces. **(80i:32021)**

32A99 None of the above, but in this section

Adachi, Kenzō On the multiplicative Cousin problem for $A(D)$. **80i:32025**
Raeburn, Iain An implicit function theorem in Banach spaces. **80i:32016**

Secondary classifications:

de Matos, Mário Carvalho On separately holomorphic and Silva holomorphic mappings. **(80j:46073)**
Naas, Josef (*with* Tutschke, Wolfgang) Some probabilistic aspects in partial complex differential equations. (Russian summary) **(80b:35060)**
Tagirov, T. S. Properties of various kinds of analyticity for certain classes of complex infinite-dimensional spaces. (Russian) **(80d:46084)**
Tutschke, Wolfgang *See* **Naas, Josef, (80b:35060)**
Yoshino, Kunio Analytic continuation of arithmetic holomorphic functions on a half-plane. **(80h:30005)**

32Bxx Local analytic geometry [See also 13–XX and 14–XX.]

32B05 Analytic algebra and generalizations, preparation theorems

Becker, Joseph On the nonflatness of analytic tensor product. **80k:32008**
Granger, Jean-Michel Sur le degré local d'un germe d'application analytique réelle. (English summary) **80c:32008a**
Hefez, A. The relations among analytic, differentiable and formal codimension. (Italian summary) **80h:32017**
Južakov, A. P. Calculation of coefficients of a Weierstrass pseudopolynomial. (Russian) **80m:32007**

Merrien, Jean Applications des faisceaux analytiques semi-cohérents aux fonctions différentiables. (English summary) **80m:32008**
Mujica, Jorge Ideals of holomorphic functions on Fréchet spaces. **80f:32026**
Tougeron, Jean-Claude Sur l'anneau des germes de fonctions holomorphes qui appartiennent à la classe de Bernstein. (English summary) **80e:32005**

Secondary classifications:

Bierstone, Edward (*with* Milman, Pierre) Invariant solutions of analytic equations. **(80i:14020)**
Bochnak, Jacek (*with* Kucharz, Wojciech) Sur les germes d'applications differentiables à singularités isolées. **(80j:58009)**
Brinke, Rainer Glatte Morphismen in der affinoiden Geometrie. **(80g:32046)**
Djoković, Dragomir Ž. A property of the Taylor expansion of a class of rational functions in several variables. **(80e:41015)**
Heinrich, E. Die Picardgruppen affinoider Algebren und ihrer affinen Reduktionen. **(80c:32030)**
Kucharz, Wojciech *See* **Bochnak, Jacek, (80j:58009)**
Milman, Pierre *See* **Bierstone, Edward, (80k:14020)**

32B10 Germs of analytic sets

Ephraim, Robert Isosingular loci and the Cartesian product structure of complex analytic singularities. **80i:32027**

Secondary classifications:

Lê Dũng Tráng Sur les cycles évanouissants des espaces analytiques. (English summary) **(80i:32030)**

32B15 Analytic subsets of affine space

Langmann, Klaus Zur Kohärenz der Idealgarbe. **80g:32012**

Secondary classifications:

Becker, Joseph Higher derivations and integral closure. **(80a:13005)**
Nakada, Kiyoto (*with* Watanabe, Chikara) A note on a polynomial mapping on $\mathbf{C}^n$. **(80h:32048)**
Watanabe, Chikara *See* **Nakada, Kiyoto, (80h:32048)**

32B20 Semi-analytic sets and subanalytic sets

Denkowska, Z. On a continuous extension of an algebraic function. **80i:32028**
Hardt, Robert M. Continuité locale Hölder de la tranche d'une chaîne sous-analytique par une application sous-analytique. (English summary) **80a:32007**
Stasica, J. A transversality property weaker than the Whitney a-regularity. **80i:32029**

Secondary classifications:

Sussmann, Héctor J. Subanalytic sets and feedback control. **(80b:34085)**

32B25 Triangulation and related questions

Secondary classifications:

McCrory, Clint Stratified general position. **(80m:57016)**

32B30 Local singularities [See also 14B05, 32C40, 32C42.]

Bernšteĭn, I. N. (*with* Švarcman, O. V.) Chevalley's theorem for complex crystallographic Coxeter groups. (Russian) **80d:32007**
Bingener, Jürgen (*with* Flenner, Hubert) Einige Beispiele nichtalgebraischer Singularitäten. **80j:32013**
Flenner, Hubert *See* **Bingener, Jürgen, 80j:32013**
Granger, Michel Additif à la note: "Sur le degré local d'un germe d'application analytique réelle" (C. R. Acad. Sci. Paris Sér. A–B **287** (1978), no. 7, A531–A534). **85c:32008b**
Lê Dũng Tráng The geometry of the monodromy theorem. **80i:32031**
Sur les cycles évanouissants des espaces analytiques. (English summary) **80i:32030**
Le théorème de la monodromie singulier. (English summary) **80i:32032**
(*with* Perron, Bernard) Sur la fibre de Milnor d'une singularité isolée en dimension complexe trois. (English summary) **80k:32009**
Ljaško, O. V. The geometry of bifurcation diagrams. (Russian) **80k:32010**
Noui-Mehidi, Samir Queues d'arondes d'une déformation semi-universelle. (English summary) **80i:32033**
Oka, Mutsuo On the bifurcation of the multiplicity and topology of the Newton boundary. **80h:32018**
Perron, Bernard *See* **Lê Dũng Tráng, 80k:32009**
Randell, Richard The Milnor number of some isolated complete intersection singularities with C^*-action. **80a:32008**
Sekiguchi, Jirō (*with* Yano, Tamaki) The algebra of invariants of the Weyl group $W(F_4)$. **80k:32011**
(*with* Yano, Tamaki) A note on the Coxeter group of type H_3. **80k:32012**
Švarcman, O. V. *See* **Bernšteĭn, I. N., 80d:32007**
Yano, Tamaki *See* **Sekiguchi, Jirō, 80k:32011** *and* **Sekiguchi, Jirō, 80k:32012**

Secondary classifications:

A'Campo, Norbert Tresses, monodromie et le groupe symplectique. **(80m:14006)**
Belickiĭ, G. R. Normal forms in relation to the filtering action of a group. (Russian) **(80k:58018)**
Danilov, V. I. Newton polyhedra and vanishing cohomology. (Russian) **(80k:14001)**
Durfee, Alan H. Fifteen characterizations of rational double points and simple critical points. **(80m:14003)**
Kirby, Robion C. (*with* Scharlemann, Martin) Eight faces of the Poincaré homology 3-sphere. **(80k:57042)**
Lê Dũng Tráng (*with* Teissier, Bernard) Sur la géométrie des surfaces complexes. I. Tangentes exceptionnelles. **(80f:32008)**
Randell, Richard On the topology of nonisolated singularities. **(80f:14002)**
Savel'ev, I. V. Structure of the singularities of a class of complex hypersurfaces. (Russian) **(80g:32018)**
Scharlemann, Martin *See* **Kirby, Robion C., (80k:57042)**
Takano, Kyoichi A reduction theorem for a linear Pfaffian system with regular singular points. **(80i:58005)**
Teissier, Bernard *See* **Lê Dũng Tráng, (80f:32008)**
Wahl, Jonathan M. Simultaneous resolution of rational singularities. **(80e:14013)**
Simultaneous resolution and discriminantal loci. **(80g:14008)**
Yau, Stephen Shing Toung On maximally elliptic singularities. **(80j:32021)**

32B99 None of the above, but in this section

Barlet, Daniel Déformations d'ordre un de cycles analytiques. (English summary) **80j:32014**
Françoise, Jean-Pierre Modèle local simultané d'une fonction et d'une forme de volume. (English summary) **80k:32013**
Kuo, Tzee Char Une classification des singularités réelles. (English summary) **80i:32034**

Secondary classifications:

Izumi, Shuzo The exterior derivation and the orders of differential forms on contractible algebras. **(80j:32018)**
Levelt, A. H. M. A descent theorem for differential operators of the first kind. **(80h:12021)**
Neumann, Walter D. (*with* Raymond, Frank) Seifert manifolds, plumbing, μ-invariant and orientation reversing maps. **(80e:57008)**
Raymond, Frank *See* **Neumann, Walter D., (80e:57008)**
Soraggi, Roberto L. Bounded sets in spaces of holomorphic germs. **(80i:46038)**

32Cxx General theory of analytic spaces

32C05 Real-analytic manifolds, real-analytic spaces [See also 14G30, 58A07.]

Acquistapace, F. (*with* Broglia, F.; Tognoli, Alberto) An embedding theorem for real analytic spaces. **80m:32009**
Andreotti, Aldo (*with* Fredricks, Gregory A.) Embeddability of real analytic Cauchy-Riemann manifolds. **80h:32019**
Broglia, F. *See* **Acquistapace, F.; et al., 80m:32009**
Burns, D., Jr. (*with* Shnider, S.) Geometry of hypersurfaces and mapping theorems in $\mathbf{C}^n$. **80b:32020**
Fredricks, Gregory A. *See* **Andreotti, Aldo, 80h:32019**
Guaraldo, Francesco (*with* Macri, Patrizia) Some approximation problems for C^∞ functions. (Italian. English summary) **80h:32021**
Macri, Patrizia *See* **Guaraldo, Francesco, 80h:32021**
Shnider, S. *See* **Burns, D., Jr., 80h:32020**
Tognoli, Alberto *See* **Acquistapace, F.; et al., 80m:32009**
Webster, S. M. On the Moser normal form at a non-umbilic point. **80b:32008**

Secondary classifications:

Adkins, William A. (*with* Gianni, P.; Tognoli, Alberto) A Nullstellensatz for an algebraically non-closed field. (Italian summary) **(80d:14013)**
Akbulut, Selman Algebraic equations for a class of P. L. spaces. **(80a:57009)**
Bejancu, Aurel CR submanifolds of a Kaehler manifold. II. **(80e:53052)**
Benedetti, Riccardo (*with* Tognoli, Alberto) Sur les fibrés vectoriels algébriques réels. (English summary) **(80g:14025)**
Bochnak, Jacek Sur le 17ème problème de Hilbert pour les fonctions de Nash. (English summary) **(80d:12021)**
Gianni, P. *See* **Adkins, William A.; et al., (80d:14013)**
Kon, Masahiro *See* **Yano, Kentaro, (80c:53072)**
Kulkarni, Ravindra S. P. A. Smith-theoretic algebro-geometric invariants of compact differentiable manifolds. **(80d:57012)**
Maebashi, Toshiyuki (*with* Maeda, Sadahiro) Real submanifolds of constant mean curvature in complex projective space. **(80e:53053)**
Maeda, Sadahiro *See* **Maebashi, Toshiyuki, (80e:53053)**
Merrien, Jean Faisceaux analytiques semi-cohérents. (English summary) **(80k:32015)**
Tognoli, Alberto *See* **Adkins, William A.; et al., (80d:14013)** *and* **Benedetti, Riccardo, (80g:14025)**
Yano, Kentaro (*with* Kon, Masahiro) CR-sous-variétés d'un espace projectif complexe. (English summary) **(80c:53072)**

32C10 Complex manifolds {For almost complex manifolds, see 53C15.}

Barros, M. *See* **Gray, Alfred; et al., 80m:32010**
Čirka, E. M. Regularization and $\bar\partial$-homotopy on a complex manifold. (Russian) **80j:32015**
Gray, Alfred (*with* Barros, M.; Martínez Naveira, Antonio; Vanhecke, Lieven) The Chern numbers of holomorphic vector bundles and formally holomorphic connections of complex vector bundles over almost complex manifolds. **80m:32010**
Kato, Masahide Some remarks on subvarieties of Hopf manifolds. **80i:32035**
Martínez Naveira, Antonio *See* **Gray, Alfred; et al., 80m:32010**

Morgan, John W. Hodge theory for the algebraic topology of smooth algebraic varieties. **(80g:32013)**
Morita, Shigeyuki Invariants of almost complex structures and their applications. (Japanese) **(80c:32009)**
L-equivalence classes of submanifolds in complex projective spaces. **(80f:32036)**
Neisendorfer, Joseph (*with* Taylor, Laurence R.) Dolbeault homotopy theory. **(80f:32004)**
Siu, Yum Tong (*with* Yau, Shing Tung) Errata to the paper: "Complete Kähler manifolds with nonpositive curvature of faster than quadratic decay" [Ann. of Math. (2)**105** (1977), no. 2, 225–264; MR **55** #10719]. **(80h:32022)**
Taylor, Laurence R. *See* **Neisendorfer, Joseph, (80f:32004)**
Toledo, Domingo (*with* Tong, Yue Lin Lawrence) Duality and intersection theory in complex manifolds. I. **(80d:32008)**
Tong, Yue Lin Lawrence *See* **Toledo, Domingo, (80d:32008)**
Vanhecke, Lieven *See* **Gray, Alfred; et al., (80m:32010)**
Yau, Shing Tung *See* **Siu, Yum Tong, (80h:32022)**

Secondary classifications:

Brotherton, Neil Some parallelizable four-manifolds not admitting a complex structure. **(80e:57022)**
Brun, Jérôme Sur la simplification par les grassmanniennes. **(80h:32058)**
Carrell, James B. (*with* Sommese, Andrew John) C^*-actions. **(80h:32053)**
(*with* Sommese, Andrew John) Some topological aspects of C^* actions on compact Kaehler manifolds. **(80m:32032)**
Chen, Bang-yen Chern classes and Kaehler metrics. **(80a:53077)**
Ciliberto, Ciro On the Euler-Poincaré characteristic of complete intersections in CP', with an isolated singularity. (Italian. English summary) **(80f:57011)**
Gordon, Gerald Leonard On the primitive cohomology of submanifolds. **(80e:14001)**
Griffiths, Phillip A. Complex differential and integral geometry and curvature integrals associated to singularities of complex analytic varieties. **(80k:53101)**
Kawasaki, Tetsuro The Riemann-Roch theorem for complex V-manifolds. **(80f:58042)**
Kitahara, Haruo Sur le second nombre de Betti des variétés kählériennes complètes. (English summary) **(80m:53049)**
Lieberman, David I. Compactness of the Chow scheme: applications to automorphisms and deformations of Kähler manifolds. **(80h:32056)**
Mabuchi, Toshiki Almost homogeneous torus actions of varieties with ample tangent bundle. **(80k:14050)**
MacPherson, Robert Characteristic classes for singular varieties. **(80g:57031)**
Neisendorfer, Joseph The rational homotopy groups of complete intersections. **(80j:55018)**
Rees, Elmer On submanifolds of projective space. **(80f:57022)**
Sasaki, Takeshi (*with* Shiga, Kiyoshi) Remarks on the curvature of hypersurfaces in C^n. **(80j:53063)**
Shiga, Kiyoshi A geometric characterization of C^n and open balls. **(80m:53051)**
See also **Sasaki, Takeshi, (80j:53063)**
Sommese, Andrew John *See* **Carrell, James B., (80h:32053)** *and* **Carrell, James B., (80m:32032)**
Toledo, Domingo (*with* Tong, Yue Lin Lawrence) Duality and intersection theory in complex manifolds. II. The holomorphic Lefschetz formula. **(80j:32045)**
Tong, Yue Lin Lawrence *See* **Toledo, Domingo, (80j:32045)**
Weils, R. O., Jr. Complex manifolds and mathematical physics. **(80h:32001)**
Astérisque *See* **Première classe de Chern et courbure de Ricci: preuve de la conjecture de Calabi, (80j:53064)**
Calabi conjecture *See* **Première classe de Chern et courbure de Ricci: preuve de la conjecture de Calabi, (80j:53064)**
Palaiseau *See* **Première classe de Chern et courbure de Ricci: preuve de la conjecture de Calabi, (80j:53064)**
Première classe de Chern et courbure de Ricci: preuve de la conjecture de Calabi ★Première classe de Chern et courbure de Ricci: preuve de la conjecture de Calabi. **(80j:53064)**

32C15 Complex spaces

Barlet, Daniel Le faisceau $\omega_X^\cdot$ sur un espace analytique X de dimension pure. **80f:32037**

Secondary classifications:

Bingener, Jürgen (*with* Flenner, Hubert) Einige Beispiele nichtalgebraischer Singularitäten. **(80j:32013)**
Flenner, Hubert *See* **Bingener, Jürgen, (80j:32013)**
Holmann, Harald On the stability of holomorphic foliations with all leaves compact. **(80b:57023)**

32C20 Normal analytic spaces

Bănică, Constantin Le lieu réduit et le lieu normal d'un morphisme. **80k:32014**

32C25 Analytic subsets and submanifolds

Dubson, Alberto S. Théorie d'intersection pour les cycles algébriques ou C-analytiques réels. (English summary) **80b:32009**
Yüan, Hsi Shih Subvarieties of codimension $\geqslant 2$. **80f:32005**

Secondary classifications:

Barlet, Daniel Déformations d'ordre un de cycles analytiques. (English summary) **(80j:32014)**
Cassa, Antonio A theorem on complete intersection curves and a consequence for the Runge problem for analytic sets. **(80e:32009)**
Dautov, Š. A. (*with* Henkin, G. M.) Zeros of holomorphic functions of finite order and weighted estimates for the solutions of the $\bar\partial$-equation. (Russian) **(80b:32005)**
Henkin, G. M. *See* **Dautov, Š. A., (80b:32005)**
Mattei, Jean-François (*with* Moussu, Robert) Intégrales premières d'une forme de Pfaff analytique. (English summary) **(80h:58003)**
Moussu, Robert *See* **Mattei, Jean-François, (80h:58003)**
Suzuki, Masakazu Sur les intégrales premières de certains feuilletages analytiques complexes. **(80h:57038)**

32C30 Integration on analytic sets and spaces, currents {For local theory, see 32A25 or 32A27.}

Coleff, Nicolas R. (*with* Herrera, Miguel E.) ★Les courants résiduels associés à une forme méromorphe. **80j:32016**
Herrera, Miguel E. *See* **Coleff, Nicolas R., 80j:32016**
Lelong, Pierre Sur les cycles holomorphes à coefficients positifs dans C^n et un complément au théorème de E. Bombieri. **80j:32017**
Otsuki, Makoto A residue formula for Chern classes associated with logarithmic connections. **80f:32006**

Secondary classifications:

Harvey, Reese (*with* Lawson, H. Blaine, Jr.) A constellation of minimal varieties defined over the group G_2. **(80m:49033)**
Kiselman, Christer O. Densité des fonctions plurisousharmoniques. (English summary) **(80k:32021)**
Lawson, H. Blaine, Jr. *See* **Harvey, Reese, (80m:49033)**

32C35 Analytic sheaves and cohomology groups [See also 14Fxx, 18F20, 55N30.]

Izumi, Shuzo The exterior derivation and the orders of differential forms on contractible algebras. **80j:32018**
Jurchescu, Martin Variétés mixtes. **80m:32011**
Leiterer, Jürgen Banach coherence and Oka's principle. **80c:32010**
Merrien, Jean Faisceaux analytiques semi-cohérents. (English summary) **80k:32015**
Palamodov, V. P. The tangent complex of an analytic space. (Russian) **80j:32019**
Stănăşilă, O. On the dualizing complex. **80m:32012**

Secondary classifications:

Bănică, Constantin Sur le complexe cotangent de Lichtenbaum et Schlessinger. (English summary) **(80d:32023)**
Bartenwerfer, Wolfgang Die höheren metrischen Kohomologiegruppen affinoider Räume. **(80h:32051)**
Eastwood, Michael G. On Dolbeault cohomology and envelopes of holomorphy. **(80b:32013)**
Kato, Goro C. *See* **Lubkin, Saul, (80d:55006)**
Laiterer, Ju. Oka's principle for sheaves of infinite-dimensional nonabelian groups. (Russian) **(80e:32024)**
Langmann, Klaus Zur Kohärenz der Idealgarbe. **(80g:32012)**
Leiterer, Jürgen Local and global equivalence of meromorphic operator functions. I. **(80f:47008a)**
Local and global equivalence of meromorphic operator functions. II. **(80f:47008b)**
Lubkin, Saul (*with* Kato, Goro C.) Second Leray spectral sequence of relative hypercohomology. **(80d:55006)**
Mallios, Anastasios Generalized structure sheaf envelopes of topological function algebra spaces. (Greek summary) **(80j:46079)**
Martini, Franca An extension of Poincaré's duality theorem. (Italian. English summary) **(80f:55001)**

32C36 Local cohomology of analytic spaces

Adkins, William A. (*with* Leahy, J. V.) A topological criterion for local optimality of weakly normal complex spaces. **80f:32038**
Leahy, J. V. *See* **Adkins, William A., 80f:32038**
Mebkhout, Zoghman Cohomologie locale d'une hypersurface. **80h:32023**
Ramis, Jean-Pierre Géométrie analytique et géométrie algébrique (variations sur le thème "GAGA"). **80g:32014**
Riemer, Rolf-Ingraban Über eine Klasse von Garben mit isolierter Singularität. **80c:32011**

Secondary classifications:

Bănică, Constantin Le lieu réduit et le lieu normal d'un morphisme. **(80k:32014)**
Stoia, Manuela The singular set of a sheaf. (Romanian. English summary) **(80k:14010)**

32C37 Duality theorems

Golovin, V. D. Duality theorems on complex spaces. (Russian. Georgian and English summaries) **80g:32015**

Secondary classifications:

El Zein, Fouad Complexe dualisant et applications à la classe fondamentale d'un cycle. (English summary) **(80h:14009)**
Isidro, J. M. Topological duality on the functional space $\mathcal{H}_b(U, F)_{\tau_b}$. **(80k:46048)**
Mebkhout, Zoghman Cohomologie locale d'une hypersurface. **(80h:32023)**
Ramis, Jean-Pierre Géométrie analytique et géométrie algébrique (variations sur le thème "GAGA"). **(80g:32014)**
Stănăşilă, O. On the dualizing complex. **(80m:32012)**

32C40 Singularities

Buchweitz, Ragnar-Olaf (*with* Greuel, Gert-Martin) Le nombre de Milnor, équisingularité et déformations de singularités des courbes réduites. (English summary) **80b:32010**

Cih, A. K. Milnor's number and the multiplicity of the zero of a holomorphic mapping. (Russian) **80c:32012**

Flenner, Hubert Über die de Rham Kohomologie analytischer Algebren. **80f:32007**

Françoise, Jean-Pierre Le théorème de M. Sébastiani pour une singularité quasi homogène isolée. (English summary) **80j:32020**

Gorjunov, V. V. The cohomology of braid groups of series C and D and certain stratifications. (Russian) **80g:32020**

Greuel, Gert-Martin *See* **Buchweitz, Ragnar-Olaf, 80b:32010**

Hansen, Vagn Lundsgaard Polynomial covering spaces and homomorphisms into the braid groups. **80m:32013**

Hénaut, Alain Cycles et cône tangent de Zariski. (English summary) **80a:32009**

Higuchi, Teiichi (*with* Watanabe, Kimio) On nowhere vanishing holomorphic forms of certain rational double points. **80g:32016**

(*with* Watanabe, Kimio; Ohyanagi, Shigeki) On purely elliptic singularities. **80g:32017**

Laufer, Henry B. On normal two-dimensional double point singularities. **80c:32013**

Lê Dũng Tráng (*with* Teissier, Bernard) Sur la géométrie des surfaces complexes. I. Tangentes exceptionnelles. **80f:32008**

(Malgrange, B.) *See* **Sebastiani, Marcos, 80b:32025**

Malikov, H. M. A versal integral of type A_k and a maximally overdetermined system. (Russian. Tajiki summary) **80b:32024**

Ohyanagi, Shigeki *See* **Higuchi, Teiichi; et al., 80g:32017** *and* **Yoshinaga, Etsuo, 80k:32016**

Savel'ev, I. V. Structure of the singularities of a class of complex hypersurfaces. (Russian) **80g:32018**

Sebastiani, Marcos Monodromie et polynôme de Bernstein, d'après Malgrange. **80b:32025**

Suzuki, Masahiko *See* **Yoshinaga, Etsuo, 80f:32009** *and* **Yoshinaga, Etsuo, 80k:32017**

Takijima, Kunio (*with* Tomaru, Tadashi) Local properties of quotient analytic spaces. **80b:32011**

Teissier, Bernard *See* **Lê Dũng Tráng, 80f:32008**

Tomaru, Tadashi *See* **Takijima, Kunio, 80b:32011**

Vainštein, F. V. The cohomology of braid groups. (Russian) **80g:32019**

Varčenko, A. N. A formula for the rank of the homology groups of the boundary of an isolated singularity of a surface in $\mathbf{C}^3$ and the Newton diagram. (Russian) **80e:32006**

Watanabe, Kimio *See* **Higuchi, Teiichi, 80g:32016** *and* **Higuchi, Teiichi; et al., 80g:32017**

Yano, Tamaki On the theory of b-functions. **80h:32026**

Yoshinaga, Etsuo (*with* Suzuki, Masahiko) On the topological types of singularities of Brieskorn-Pham type. **80f:32009**

(*with* Ohyanagi, Shigeki) A criterion for 2-dimensional normal singularities to be weakly elliptic. **80k:32016**

(*with* Suzuki, Masahiko) Topological types of quasihomogeneous singularities in $\mathbf{C}^2$. **80k:32017**

Secondary classifications:

Arnol'd, V. I. Critical points of functions on a manifold with boundary, the simple Lie groups B_k, C_k, F_4 and singularities of evolutes. (Russian) **(80j:58008)**

Assion, Joachim A proof of a theorem of Coxeter. **(80i:20018)**

Einige endliche Faktorgruppen der Zopfgruppen. **(80k:20036)**

Behnke, Kurt (*with* Riemenschneider, Oswald) Diedersingularitäten. **(80a:14001)**

Bernštein, I. N. (*with* Švarcman, O. V.) Chevalley's theorem for complex crystallographic Coxeter groups. (Russian) **(80d:32007)**

Bingener, Jürgen (*with* Flenner, Hubert) Einige Beispiele nichtalgebraischer Singularitäten. **(80j:32013)**

Brenton, L. (*with* Morrow, J.) Compactifications of $\mathbf{C}^n$. **(80d:32029)**

Durfee, Alan H. Fifteen characterizations of rational double points and simple critical points. **(80m:14003)**

Ephraim, Robert Isosingular loci and the Cartesian product structure of complex analytic singularities. **(80i:32027)**

Fainberg, V. Ja. (*with* Solov'ev, M. A.) How can local properties be described in field theories without strict locality? **(80c:81057)**

Fischer, Gerd (*with* Forster, Otto) Ein Endlichkeitssatz für Hyperflächen auf kompakten komplexen Räumen. **(80i:32042)**

Flatto, Leopold Invariants of finite reflection groups. **(80j:14010)**

Flenner, Hubert *See* **Bingener, Jürgen, (80j:32013)**

Forster, Otto *See* **Fischer, Gerd, (80i:32042)**

Harer, John On handlebody structures for hypersurfaces in $\mathbf{C}^3$ and $\mathbf{C}P^3$. **(80d:57020)**

Higuchi, Teiichi (*with* Tomaru, Tadashi) On the degree of determinacy of homogeneous polynomials in complex variables. **(80a:14002)**

Hirschowitz, André Sur les plongements du type déformation. **(80j:32038)**

Hoare, A. H. M. On lifting Fuchsian groups. **(80m:30056)**

Kashiwara, Masaki (*with* Kawai, Takahiro) On the characteristic variety of a holonomic system with regular singularities. **(80k:58089)**

Kawai, Takahiro *See* **Kashiwara, Masaki, (80k:58089)**

Kervaire, Michel (*with* Weber, Claude) A survey of multidimensional knots. **(80f:57009)**

Klarès, Bernard Sur la monodromie des systèmes de Pfaff du type de Fuchs sur $P_m(\mathbf{C})$. **(80k:32026)**

Morrow, J. *See* **Brenton, L., (80d:32029)**

Orlik, Peter Singularities and group actions. **(80e:57052)**

Riemenschneider, Oswald *See* **Behnke, Kurt, (80a:14001)**

Smythe, N. F. The Burau representation of the braid group is pairwise free. **(80m:20037)**

Solov'ev, M. A. *See* **Fainberg, V. Ja., (80c:81057)**

Stylnev, V. B. Taking the root in the braid group. (Russian) **(80j:57002)**

Švarcman, O. V. *See* **Bernštein, I. N., (80d:32007)**

Teissier, Bernard On a Minkowski-type inequality for multiplicities. II. **(80j:14002)**

Tomaru, Tadashi *See* **Higuchi, Teiichi, (80a:14002)**

Weber, Claude *See* **Kervaire, Michel, (80f:57009)**

Yau, Stephen Shing Toung Normal singularities of surfaces. **(80f:14020)**

Yüan, Hsi Shih The configuration of singular varieties. **(80m:32014)**

Zinde, V. M. Studies of homomorphisms of Artin groups. **(80j:20039)**

32C42 Stratified sets, etc. [See also 32Bxx.]

Ènol's'kiĭ, V. Z. *See* **Golubeva, V. A., 80d:32009**

Golubeva, V. A. (*with* Ènol's'kiĭ, V. Z.) The differential equations for the Feynman amplitude of a single-loop graph with four vertices. (Russian) **80d:32009**

Okonek, Christian Das $K(\pi, 1)$-Problem für die affinen Wurzelsysteme vom Typ A_m, C_n. **80f:32039**

Yüan, Hsi Shih The configuration of singular varieties. **80m:32014**

32C45 Modifications, resolution of singularities [See also 14E15.]

Ancona, Vincenzo (*with* Tomassini, G.) Théorèmes d'existence pour les modifications analytiques. **80g:32021**

Aroca Hernández-Ros, José Manuel (*with* Hironaka, Heisuke; Vicente, José L.) ★Desingularization theorems. **80h:32027**

Barlet, Daniel Majoration du volume des fibres génériques et forme géométrique du théorème d'aplatissement. (English summary) **80b:32012**

Becker, Joseph (*with* Gurjar, Rajendra) Curves with large tangent space. **80a:32010**

Di Stefano, Francesco Paolo Oriented blowing-up. (Italian. English summary) **80g:32022**

Gurjar, Rajendra *See* **Becker, Joseph, 80a:32010**

Hironaka, Heisuke *See* **Aroca Hernández-Ros, José Manuel; et al., 80h:32027**

Rabinowitz, Joshua H. On monoidal transformations of coherent sheaves. **80g:32023**

Tomassini, G. Structure theorems for modifications of complex spaces. **80m:32015**

See also **Ancona, Vincenzo, 80g:32021**

Vicente, José L. *See* **Aroca Hernández-Ros, José Manuel; et al., 80h:32027**

Yau, Stephen Shing Toung On maximally elliptic singularities. **80j:32021**

Secondary classifications:

Hitchin, N. J. Polygons and gravitons. **(80h:53047)**

32C99 None of the above, but in this section

Ishimura, Ryuichi Homomorphismes du faisceau des germes de fonctions holomorphes dans lui-même et opérateurs différentiels. **80g:32024**

Secondary classifications:

Kashiwara, Masaki On the holonomic systems of linear differential equations. II. **(80a:58035)**

Langmann, Klaus Zur Kohärenz der Idealgarbe. **(80g:32012)**

32Dxx Analytic continuation

32D05 Domains of holomorphy

Górski, Jerzy Domains of holomorphy for different classes of functions in $\mathbf{C}^n$. (Polish. English summary) **80h:32028**

Pflug, Rolf Peter Functions of polynomial growth and domains of holomorphy. **80h:32029**

Secondary classifications:

Bedford, Eric (*with* Burns, Dan) Domains of existence for plurisubharmonic functions. **(80f:32014)**

Burns, Dan *See* **Bedford, Eric, (80f:32014)**

Kazlow, M. CR functions and tube manifolds. **(80m:32001)**

Kramm, Bruno Ein Approximationssatz für holomorphe Funktionen auf nicht-kompakten Riemannschen Flächen. (English summary) **(80j:46084)**

Pflug, Rolf Peter Ein C^∞-glattes, streng pseudokonvexes Gebiet im $\mathbf{C}^3$ mit nicht holomorph-konvexer Projektion. **(80d:32018)**

32D10 Envelopes of holomorphy

Deblard, Amédée (*with* Gaveau, Bernard) Problème de Dirichlet pour l'équation de Lévi. (English summary) **80f:32010**

Dloussky, G. Prolongements d'applications analytiques. **80f:32011**

Eastwood, Michael G. On Dolbeault cohomology and envelopes of holomorphy. **80b:32013**

Gaveau, Bernard *See* **Deblard, Amédée, 80f:32010**

Hunt, L. R. (*with* Kazlow, M.) A two-sided H. Lewy extension phenomenon. **80g:32025**

Kazlow, M. *See* **Hunt, L. R., 80g:32025**

Ohgai, Seiko A note on envelopes of holomorphy. **80j:32022**

Secondary classifications:

Sebbar, Ahmed Prolongement des solutions d'un opérateur différentiel d'ordre infini. (English summary) **(80k:32003)**

32D15 Continuation of analytic objects

Bedford, Eric (*with* Fornaess, John Erik) Local extension of CR functions from weakly pseudoconvex boundaries. **80c:32014**

Dloussky, G. Analyticité séparée et prolongements analytiques (d'après le dernier

manuscrit de W. Rothstein). **80j:32023**
Ehrenpreis, Leon Edge of the wedge theorem for partial differential equations. **80i:32040**
Fornaess, John Erik *See* **Bedford, Eric, 80c:32014**
Harita, Mitsuru (*with* Sakai, Eiichi) On the continuability of holomorphic functions with real parameters. **80g:32026**
Jennane, B. Extension d'une fonction définie sur une sous-variété avec contrôle de la croissance. **80m:32016**
Napalkov, V. V. A property of analytic continuation. (Russian) **80i:32041**
Riihentaus, Juhani An extension theorem for meromorphic functions of several variables. **80e:32007**
(Rothstein, W.) *See* **Dloussky, G., 80j:32023**
Sakai, Eiichi *See* **Harita, Mitsuru, 80g:32026**

Secondary classifications:

Čirka, E. M. Analytic continuation of functions of several variables and its applications. (Russian) **(80b:32001)**
(de Jager, Eduard M.) *See* **de Roever, J. W., (80h:46058)**
Kazarjan, M. V. Separately meromorphic functions. (Russian. Armenian summary) **(80j:32003)**
Mujica, Jorge Complex homomorphisms of the algebras of holomorphic functions on Fréchet spaces. **(80j:46074)**
de Roever, J. W. ★Complex Fourier transformation and analytic functionals with unbounded carriers. **(80h:46058)**
Suzuki, Osamu The problems of Riemann and Hilbert and the relations of Fuchs in several complex variables. **(80k:32031)**

32D20 Removable singularities

Cegrell, Urban Removable singularities for plurisubharmonic functions and related problems. **80m:32017**
Gorban', A. N. Sets of removable singularities and continuous mappings. (Russian) **80d:32010**
Riihentaus, Juhani Removable singularities of analytic functions of several complex variables. **80h:32030**

Secondary classifications:

Besjes, J. (*with* Martini, R.) A generalization of Hartogs theorem. **(80c:35039)**
Dloussky, G. Prolongements d'applications analytiques. **(80f:32011)**
Jennane, B. Extension d'une fonction définie sur une sous-variété avec contrôle de la croissance. **(80m:32016)**
Martini, R. *See* **Besjes, J., (80c:35039)**
Riihentaus, Juhani An extension theorem for meromorphic functions of several variables. **(80e:32007)**

32D25 Non-Archimedean function theory

Secondary classifications:

Bosch, Siegfried Multiplikative Untergruppen in abeloiden Mannigfaltigkeiten. **(80d:14014)**

32D99 None of the above, but in this section

Favorov, S. Ju. On a question of V. S. Vladimirov. (Russian) **80c:32015**
Fischer, Gerd (*with* Forster, Otto) Ein Endlichkeitssatz für Hyperflächen auf kompakten komplexen Räumen. **80i:32042**
Forster, Otto *See* **Fischer, Gerd, 80i:32042**
(Vladimirov, V. S.) *See* **Favorov, S. Ju., 80c:32015**

Secondary classifications:

Andreotti, Aldo (*with* Nacinovich, Mauro) On the envelope of regularity for solutions of homogeneous systems of linear partial differential operators. **(80d:35113)**
Moraes, Luiza Amália Holomorphy types and Runge domains. I. (Portuguese) **(80m:32022a)**
Holomorphy types and Runge domains. II. (Portuguese. English summary) **(80m:32022b)**
Nacinovich, Mauro *See* **Andreotti, Aldo, (80d:35113)**

32Exx Holomorphic convexity

32E05 Holomorphically convex complex spaces, reduction theory

Adachi, Kenzô On the multiplicative Cousin problems for $N^p(D)$. **80g:32027**
Furushima, Mikio (*with* Ishimura, Ryuichi; Tokunaga, Shoshi; Toyo-oka, Manabu) Domaines où les germes sont engendrés par les sections globales. **80i:32043**
Ishimura, Ryuichi *See* **Furushima, Mikio; et al., 80i:32043**
Tokunaga, Shoshi *See* **Furushima, Mikio; et al., 80i:32043**
Toyo-oka, Manabu *See* **Furushima, Mikio; et al., 80i:32043**

32E10 Stein spaces, Stein manifolds

Barlet, Daniel Convexité de l'espace des cycles. (English summary) **80m:32018**
Berg, Gunnar Hyperconvexity and the Carathéodory metric. **80j:32024**
Bingener, Jürgen (*with* Flenner, Hubert) Steinsche Räume zu vorgegebenen Singularitäten. **80j:32025**
Demailly, Jean-Pierre Différents exemples de fibrés holomorphes non de Stein. **80e:32008**
Ermine, Jean-Louis Conjecture de Serre et espaces hyperconvexes. **80j:32026**
Flenner, Hubert *See* **Bingener, Jürgen, 80j:32025**
Fridman, B. L. A class of analytic polyhedra. (Russian) **80b:32014**
Furushima, Mikio (*with* Ishimura, Ryuichi; Tokunaga, Shoshi; Toyo-oka, Manabu) Sur un théorème de Grauert. **80i:32044**
Ishimura, Ryuichi *See* **Furushima, Mikio; et al., 80i:32044**
Jennane, B. Groupes de cohomologie d'un fibré holomorphe à base et à fibre de Stein. **80j:32027**
Kajiwara, Joji Steinness of a domain with a vanishing cohomology set in a product manifold of an open Riemann surface and a compact Riemann surface with genus $g > 1$. **80b:32015**
Equivalence of Steinness and validity of Oka's principle for subdomains with continuous boundaries of a Stein manifold. **80g:32028**
(*with* Nishihara, Masaru) Charakterisierung der Steinschen Teilgebiete durch Okasches Prinzip in zwei-dimensionaler Steinscher Mannigfaltigkeit. **80h:32031**
Leiterer, Jürgen Equivalence of Steinness and validity of Oka's principle for subdomains of Stein manifolds. **80m:32019**
Nishihara, Masaru *See* **Kajiwara, Joji, 80h:32031**
Nôno, Kiyoharu (*with* Sasaki, Kenji; Sugawara, Noriko) Continuation and quotient representation of meromorphic functions. **80k:32018**
Samsky, Stanley R. Finite covers and modules of functions. **80g:32029**
Sasaki, Kenji *See* **Nôno, Kiyoharu; et al., 80k:32018**
Sugawara, Noriko *See* **Nôno, Kiyoharu; et al., 80k:32018**
Tokunaga, Shoshi *See* **Furushima, Mikio; et al., 80i:32044**
Toyo-oka, Manabu *See* **Furushima, Mikio; et al., 80i:32044**
Watanabe, Kiyoshi A domain in a weakly 1-complete manifold. **80g:32030**

Secondary classifications:

Bruns, W. Basische Elemente in Steinschen Moduln. (English summary) **(80g:32031)**
Deblard, Amédée (*with* Gaveau, Bernard) Problème de Dirichlet pour l'équation de Lévi. (English summary) **(80f:32010)**
Gaveau, Bernard *See* **Deblard, Amédée, (80f:32010)**
Grauert, Hans (*with* Remmert, R.) ★Theorie der Steinschen Räume. **(80j:32001)**
Itoh, Mitsuhiro Kähler manifolds with curvature bounded from above by a decreasing function. **(80i:53021)**
Remmert, R. *See* **Grauert, Hans, (80j:32001)**
Suzuki, Masakazu Sur les opérations holomorphes de $\mathbf{C}$ et de $\mathbf{C}^*$ sur un espace de Stein. **(80h:32057)**

32E15 Runge pairs

Cassa, Antonio A theorem on complete intersection curves and a consequence for the Runge problem for analytic sets. **80e:32009**
Hulek, Klaus A remark on Runge approximation of meromorphic functions. **80i:32045**

Secondary classifications:

Furushima, Mikio (*with* Ishimura, Ryuichi; Tokunaga, Shoshi; Toyo-oka, Manabu) Domaines où les germes sont engendrés par les sections globales. **(80i:32043)**
Ishimura, Ryuichi *See* **Furushima, Mikio; et al., (80i:32043)**
Tokunaga, Shoshi *See* **Furushima, Mikio; et al., (80i:32043)**
Toyo-oka, Manabu *See* **Furushima, Mikio; et al., (80i:32043)**

32E20 Polynomial convexity

Shackell, John R. Semigroups associated with polynomial-hull structure. **80k:32019**
Siciak, J. On some inequalities for polynomials. **80m:32020**

Secondary classifications:

Mujica, Jorge Complex homomorphisms of the algebras of holomorphic functions on Fréchet spaces. **(80j:46074)**
Pleśniak, W. Invariance of the L-regularity of compact sets in $\mathbf{C}^N$ under holomorphic mappings. **(80d:32011)**

32E25 Algebras of holomorphic functions [See also 30H05, 46J10, 46J15.]

Bruns, W. Basische Elemente in Steinschen Moduln. (English summary) **80g:32031**
Canov, V. V. On hyperelliptic Riemann surfaces and doubly generated function algebras. **80f:32013**
Czaja, K. A homomorphismus of certain Stein algebras. **80g:32032**
Ephraim, Robert Multiplicative linear functionals of Stein algebras. **80c:32016**
Kon, S. H. Inner functions and the maximal ideal space of $H^\infty(U^n)$. **80i:32046**
Napalkov, V. V. Operators that commute with differentiation in spaces of functions of several variables. (Russian) **80f:32012**

Secondary classifications:

Escassut, Alain Sur la semi-norme spectrale supérieure des algèbres de Banach ultramétriques. **(80d:46127)**
Ferreira, Artur V. (*with* Tomassini, G.) Finiteness properties of topological algebras. I. **(80d:46101)**
Globevnik, J. Boundaries for polydisc algebras in infinite dimensions. **(80i:46046)**
Jakóbczak, Piotr On the existence of analytic structure in the spectrum of a uniform algebra. (Russian summary) **(80h:46078)**
Jewell, Nicholas P. (*with* Lubin, Arthur) Commuting weighted shifts and analytic function theory in several variables. **(80c:47030)**
Kumagai, Donna Subharmonic functions and uniform algebras. **(80k:46055)**
Lubin, Arthur *See* **Jewell, Nicholas P., (80c:47030)**

Nagel, Alexander Cauchy transforms of measures, and a characterization of smooth peak interpolation sets for the Ball algebra. **(80b:32007)**
Suzuki, Masaaki Intrinsic metrics of pseudoconvex domains in $\mathbf{C}^n$. **(80h:32037)**
Tomassini, G. *See* **Ferreira, Artur V.**, **(80d:46101)**
Vasilescu, Florian-Horia A Martinelli type formula for the analytic functional calculus. **(80j:47020)**

32E27 Krasner-Tate algebras, etc. (algebras of holomorphic functions over non-Archimedean fields)

Escassut, Alain Problème des 4 exponentielles p-adiques et algèbres topologiquement de type fini. **80i:32047**

Secondary classifications:

Borole, Aruna On the algebra of entire functions over a non-Archimedean field taking values in a non-Archimedean Banach algebra. **(80k:46054)**
Morita, Yasuo Krasner's analytic functions and rigid analytic spaces. **(80e:12032)**

32E30 Holomorphic and polynomial approximation

Chaumat, Jacques (*with* Chollet, Anne-Marie) Peak sets for $A^\infty(D)$. **80m:32021**
(*with* Chollet, Anne-Marie) Quelques propriétés des ensembles pics de $A^\infty(D)$. (English summary) **80b:32016**
Chollet, Anne-Marie *See* **Chaumat, Jacques**, **80b:32016** *and* **Chaumat, Jacques**, **80m:32021**
Pleśniak, W. Invariance of the L-regularity of compact sets in $\mathbf{C}^N$ under holomorphic mappings. **80d:32011**
A criterion of the L-regularity of compact sets in $\mathbf{C}^N$. **80k:32020**
Weinstock, Barnet M. Zero-sets of continuous holomorphic functions on the boundary of a strongly pseudoconvex domain. **80e:32010**
Yang, Hsi Nien Approximation by polynomial mapping subordinate to a biholomorphic mapping. **80e:32011**
Znamenskiĭ, V. A. The stability of the transfinite diameter for a compact set in $\mathbf{C}^n$. (Russian) **80j:32028**

Secondary classifications:

Čirka, E. M. Analytic continuation of functions of several variables and its applications. (Russian) **(80b:32001)**
Fritz, Günter Charakterisierungen einiger Funktionenalgebren. (English summary) **(80b:46063)**
Hakim, Monique (*with* Sibony, Nessim) Ensembles pics dans des domaines strictement pseudo-convexes. **(80c:32007)**
Sibony, Nessim *See* **Hakim, Monique**, **(80c:32007)**

32E35 Global boundary behavior of holomorphic functions

Amar, Éric (*with* Bonami, Aline) Mesures de Carleson d'ordre α et solutions au bord de l'équation $\bar\partial$. (English summary) **80h:32032**
de Bartolomeis, Paolo (*with* Landucci, Mario) Régularisation au bord et problème de Cauchy pour l'opérateur $\bar\partial$ à croissance de "type Hardy". (English summary) **80h:32033**
Bonami, Aline *See* **Amar, Éric**, **80h:32032**
Glicksberg, I. Boundary continuity of some holomorphic functions. **80h:32034**
Landucci, Mario *See* **de Bartolomeis, Paolo**, **80h:32033**
Saburi, Yutaka Vanishing theorems of cohomology groups with coefficients in sheaves of holomorphic functions with bounds. **80e:32012**

Secondary classifications:

Johnson, Kenneth D. Differential equations and the Bergman-Šilov boundary on the Siegel upper half plane. **(80d:32032)**
Nagel, Alexander Cauchy transforms of measures, and a characterization of smooth peak interpolation sets for the Ball algebra. **(80b:32007)**
Nishiwada, Kimimasa On local characterization of wave front sets in terms of boundary values of holomorphic functions. **(80i:32023)**

32E99 None of the above, but in this section

Moraes, Luiza Amália Holomorphy types and Runge domains. I. (Portuguese) **80m:32022a**
Holomorphy types and Runge domains. II. (Portuguese. English summary) **80m:32022b**

Secondary classifications:

Adachi, Kenzō On the multiplicative Cousin problem for $A(D)$. **(80i:32025)**
Greene, R. E. (*with* Wu, H.) C^∞ approximations of convex, subharmonic, and plurisubharmonic functions. **(80m:53055)**
Raeburn, Iain An implicit function theorem in Banach spaces. **(80i:32016)**
Wu, H. *See* **Greene, R. E.**, **(80m:53055)**

32Fxx Geometric convexity

32F05 Plurisubharmonic functions and generalizations [See also 31C10.]

Bachelet, Catherine Méthodes de contrôle optimal pour la résolution d'équations de Monge-Ampère généralisées. (English summary) **80d:32012**
Bedford, Eric (*with* Taylor, B. A.) Variational properties of the complex Monge-Ampère equation. I. Dirichlet principle. **80a:32011**
(*with* Fornaess, John Erik) Counterexamples to regularity for the complex Monge-Ampère equation. **80c:32017**
(*with* Burns, Dan) Domains of existence for plurisubharmonic functions. **80f:32014**
(*with* Taylor, B. A.) The Dirichlet problem for an equation of complex Monge-Ampère type. **80j:32029**
Extremal plurisubharmonic functions for certain domains in $\mathbf{C}^2$. **80j:32030**
Brossard, Jean Comportement des fonctions biharmoniques là où l'intégrale d'aire est finie. (English summary) **80d:32013**
Burns, Dan *See* **Bedford, Eric**, **80f:32014**
Cegrell, Urban Delta-plurisubharmonic functions. **80m:32023**
Some properties of plurisubharmonic measures. **80e:32013**
Chądzyński, Jacek Some generalization of the maximum principle for the quotient of plurisubharmonic functions. (Russian summary) **80c:32018**
Estévez, Margarita (*with* Hervés, Carlos) Mesures gaussiennes complexes et fonctions plurisousharmoniques en dimension infinie. (English summary) **80a:32012**
Forelli, Frank Some extreme rays of the positive pluriharmonic functions. **80b:32017**
Fornaess, John Erik Plurisubharmonic defining functions. **80h:32035**
See also **Bedford, Eric**, **80c:32017**
Gaveau, Bernard Diffusion des fonctions convexes, plurisousharmoniques et des courants positifs fermés. (English summary) **80a:32013**
Hervés, Carlos *See* **Estévez, Margarita**, **80a:32012**
Hunt, L. R. (*with* Murray, John J.) q-plurisubharmonic functions and a generalized Dirichlet problem. **80b:32018**
Kalka, Morris On a conjecture of Hunt and Murray concerning q-plurisubharmonic functions. **80e:32014**
Kiselman, Christer O. The partial Legendre transformation for plurisubharmonic functions. **80d:32014**
Densité des fonctions plurisousharmoniques. (English summary) **80k:32021**
Laville, Guy Sur le calcul de la fonction conjuguée à plusieurs variables complexes. (English summary) **80d:32015**
Lelong, Pierre Application des propriétés des fonctions plurisousharmoniques à un problème de mesure dans les espaces vectoriels complexes. **80g:32033**
Ensembles de contrôle de croissance pour l'analyse complexe dans les espaces de Fréchet. (English summary) **80b:32019**
Murray, John J. *See* **Hunt, L. R.**, **80b:32018**
Taylor, B. A. *See* **Bedford, Eric**, **80a:32011** *and* **Bedford, Eric**, **80j:32029**
Wiślarski, T. Remarks on a paper: "The regularization of the supremum of a family of plurisubharmonic functions" [Dokl. Akad. Nauk Tadžik. SSR **17** (1974), no. 9, 14–17; MR **56** #12312] by M. Širinbekov. **80j:32031**

Secondary classifications:

Chądzyński, Jacek Extremum principle for the quotient of plurisubharmonic functions. I. (Polish summary) **(80e:32020a)**
Extremum principle for the quotient of plurisubharmonic functions. II. (Polish summary) **(80e:32020b)**
Kiselman, Christer O. Plurisubharmonic functions and plurisubharmonic topologies. **(80k:31005)**
Kołaski, Clinton Measures whose integral transforms are pluriharmonic. **(80k:32006)**
(Lelong, Pierre) *See* **Nguyen Thanh Van**, **(80b:46053)**
Nguyen Thanh Van Sur le lemme de Hartogs dans les espaces vectoriels topologiques de Baire. (English summary) **(80b:46053)**
Okada, Masami Intégrales de Lusin-Calderón pour les fonctions "multiharmoniques" définies sur les "multiboules". (English summary) **(80i:31006)**
Vladimirov, V. S. Estimation of the boundary values of the growth of nonnegative pluriharmonic functions in a tube domain over a skew cone. (Russian) **(80b:32003)**
Wu, H. An elementary method in the study of nonnegative curvature. **(80c:53054)**

32F10 q-convexity, q-concavity

Bedford, Eric (*with* Fornaess, John Erik) Biholomorphic maps of weakly pseudoconvex domains. **80d:32016**
Fornaess, John Erik *See* **Bedford, Eric**, **80d:32016**
Gindikin, S. G. (*with* Henkin, G. M.) Integral geometry for $\bar\partial$-cohomology in q-linearly concave domains in $\mathbf{CP}^n$. (Russian) **80a:32014**
Henkin, G. M. *See* **Gindikin, S. G.**, **80a:32014**
Lieb, Ingo Beschränkte Lösungen der Cauchy-Riemannschen Differentialgleichungen auf q-konkaven Gebieten. (English summary) **80a:32015**
Schmidt, Walter Cohomologie in q-konvexen Räumen und algebraische Abhängigkeit. **80i:32048**
Suzuki, Osamu Remarks on examples of 2-dimensional weakly 1-complete manifolds which admit only constant holomorphic functions. **80i:32049**
Tomassini, G. An embedding theorem for q-strongly pseudoconcave manifolds. **80c:32019**
Vo Van Tan On the embedding problem for 1-convex spaces. **80j:32032**

Secondary classifications:

Watanabe, Kiyoshi A domain in a weakly 1-complete manifold. **(80g:32030)**

32F15 Pseudoconvex domains

Diederich, Klas (*with* Fornaess, John Erik) Strictly pseudohyperbolic domains. **80d:32017**
Fadlalla, Adib A. Les boules limites de Carathéodory dans un domaine pseudoconvexe. (English summary) **80m:32024**
Fornaess, John Erik *See* **Diederich, Klas**, **80d:32017**
Fujita, Osamu Sur les systèmes de fonctions holomorphes de plusieurs variables complexes. **80j:32033**
Krantz, Steven George Characterizations of various domains of holomorphy via $\bar\partial$

estimates and applications to a problem of Kohn. **80h:32036**

Malliavin, Paul Travaux de H. Skoda sur la classe de Nevanlinna. **80b:32020**

Narasimhan, Raghavan The Levi problem and pseudo-convex domains: a survey. **80a:32016**

Pflug, Rolf Peter Ein C^∞-glattes, streng pseudokonvexes Gebiet im $\mathbf{C}^3$ mit nicht holomorph-konvexer Projektion. **80d:32018**

Pinčuk, S. I. Proper holomorphic mappings of strictly pseudoconvex domains. (Russian) **80d:32019**

Suzuki, Masaaki Intrinsic metrics of pseudoconvex domains in $\mathbf{C}^n$. **80h:32037**

Secondary classifications:

de Bartolomeis, Paolo "Hardy-like" estimates for the $\bar\partial$-operator and scripture theorems for functions in $\mathcal{H}^p$ in strictly pseudoconvex domains. (Italian summary) **80j:32004**

Dufresnoy, Alain Sur l'opérateur d'' et les fonctions différentiables au sens de Whitney. (English summary) **80i:32050**

Gaveau, Bernard Méthode de contrôle optimal en analyse complexe ou réelle. III. Diffusion des fonctions plurisousharmoniques ou convexes. **80h:31005**

Jewell, Nicholas P. (*with* Krantz, Steven George) Toeplitz operators and related function algebras on certain pseudoconvex domains. **80h:47033**

Krantz, Steven George *See* **Jewell, Nicholas P., 80h:47033**

Raeburn, Iain On Toeplitz operators associated with strongly pseudoconvex domains. **80a:47041**

Wells, R. O., Jr. Exemples de variétés de structures complexes dans les domaines strictement pseudoconvexes. **80h:32040**

32F20 Geometric results on $\bar\partial$-Neumann problems [See also 32N15.]

Charpentier, Philippe Solutions minimales de l'équation $\bar\partial u = f$ dans la boule et dans le polydisque. (English summary) **80k:32022**

Derridj, Maklouf Conditions suffisantes de sous-ellipticité pour $\bar\partial$. **80c:32020**

Estimations pour $\bar\partial$ dans des domaines non pseudo-convexes. (English summary) **80b:32021**

On some estimates for the $\bar\partial$ Neumann problem in nonpseudoconvex domains. **80k:32023**

Dufresnoy, Alain Sur l'opérateur d'' et les fonctions différentiables au sens de Whitney. (English summary) **80i:32050**

Kohn, J. J. Subellipticity of the $\bar\partial$-Neumann problem on pseudo-convex domains: sufficient conditions. **80d:32020**

Laville, Guy Ensembles de mesure nulle pour certaines mesures dans le groupe d'Heisenberg. (English summary) **80d:32021**

Manankiandrianana, Donason Comportement du noyau de la chaleur d'un opérateur hypoelliptique dégénéré pour des temps petits. (English summary) **80k:32024**

Moriyón, Roberto Regularity of the Dirichlet problem for the complex Monge-Ampère equation. **80i:32051**

Phong, D. H. On integral representations for the Neumann operator. **80h:32038**

Raboin, Pierre Le problème du $\bar\partial$ sur un espace de Hilbert. **80g:32035**

Application de la théorie de la mesure en dimension infinie à la résolution de l'équation $\bar\partial$ sur un espace de Hilbert. **80g:32034**

The $\bar\partial$ equation on a Hilbert space and some applications to complex analysis on infinite dimensional vector spaces. **80g:32036**

Le problème du $\bar\partial$ sur un espace de Hilbert. (English summary) **80i:32052**

Yamaguchi, Hiroshi Forme de Levi et l'équation $\partial^2 u/\partial z \partial \bar z = e^{2u}$. (English summary) **80c:32021**

Secondary classifications:

Bachelet, Catherine Méthodes de contrôle optimal pour la résolution d'équations de Monge-Ampère généralisées. (English summary) **80d:32012**

Boutet de Monvel, Louis On the index of Toeplitz operators of several complex variables. **80j:58063**

Čirka, E. M. Regularization and $\bar\partial$-homotopy on a complex manifold. (Russian) **80j:32015**

Henkin, G. M. *See* **Petrosjan, A. L., 80j:32007**

Kohn, J. J. Subelliptic estimates. **80i:35134**

Krantz, Steven George Intrinsic Lipschitz classes on manifolds with applications to complex function theory and estimates for the $\bar\partial$ and $\bar\partial_b$ equations. **80b:26020**

Characterizations of various domains of holomorphy via $\bar\partial$ estimates and applications to a problem of Kohn. **80h:32036**

Petrosjan, A. L. Solution with bound of the $\bar\partial$-equation in certain domains. (Russian. Armenian summary) **80e:35047**

(*with* Henkin, G. M.) Solution with a uniform estimate of the $\bar\partial$-equation in a real nondegenerate Weil polyhedron. (Russian. Armenian and English summaries) **80j:32007**

Rothschild, Linda Preiss (*with* Tartakoff, David S.) Parametrices with C^∞ error for $\Box_b$ and operators of Hörmander type. **80g:35039**

Tartakoff, David S. Local analytic hypoellipticity for $\Box_b$ on nondegenerate Cauchy-Riemann manifolds. **80g:58045**

Remarks on isolated degeneracies of the Levi form and the analytic hypoellipticity of $\Box_b$ and related partial differential operators. **80g:35040**

See also **Rothschild, Linda Preiss, 80g:35039**

32F25 Real submanifolds in complex manifolds

Beloshapka, V. K. The dimension of the group of automorphisms of an analytic hypersurface. (Russian) **80h:32039**

Ishihara, Shigeru *See* **Yano, Kentaro, 80e:32016**

Luk, Hing Sun Normalization of differential equations defining a CR structure. **80b:32022**

Pinčuk, S. I. Holomorphic mappings of real-analytic hypersurfaces. (Russian) **80c:32022**

Webster, S. M. Pseudo-Hermitian structures on a real hypersurface. **80e:32015**

The rigidity of C-R hypersurfaces in a sphere. **80d:32022**

Yano, Kentaro (*with* Ishihara, Shigeru) Real hypersurfaces of a complex manifold and distributions with complex structure. **80e:32016**

Secondary classifications:

Andreotti, Aldo (*with* Fredricks, Gregory A.) Embeddability of real analytic Cauchy-Riemann manifolds. **80h:32019**

Bejancu, Aurel On integrability conditions on a CR submanifold. **80e:53062**

Burns, D., Jr. (*with* Shnider, S.) Geometry of hypersurfaces and mapping theorems in $\mathbf{C}^n$. **80h:32020**

Fredricks, Gregory A. *See* **Andreotti, Aldo, 80h:32019**

Gaveau, Bernard Méthode de contrôle optimal en analyse complexe ou réelle. III. Diffusion des fonctions plurisousharmoniques ou convexes. **80h:31005**

Ishihara, Shigeru Distributions with complex structure. **80i:53019**

Lieb, Ingo Beschränkte Lösungen der Cauchy-Riemannschen Differentialgleichungen auf q-konkaven Gebieten. (English summary) **80a:32015**

Shnider, S. *See* **Burns, D., Jr., 80h:32020**

32F30 Pseudoconvex manifolds

Bedford, Eric (*with* Taylor, B. A.) Variational properties of the complex Monge-Ampère equation. II. Intrinsic norms. **80j:32034**

Fefferman, Charles Louis Parabolic invariant theory in complex analysis. **80j:32035**

Hill, C. Denson (*with* Taiani, Geraldine) Families of analytic discs in $\mathbf{C}^n$ with boundaries on a prescribed CR submanifold. **80c:32023**

Lai, Tung Shêng *See* **Nakano, Shigeo, 80m:32025**

Nakano, Shigeo (*with* Lai, Tung Shêng) An attempt towards the global projective embedding of pseudoconvex manifolds. **80m:32025**

Ohsawa, Takeo A counter example of ampleness of positive line bundles. **80e:32017**

Taiani, Geraldine *See* **Hill, C. Denson, 80c:32023**

Taylor, B. A. *See* **Bedford, Eric, 80j:32034**

Secondary classifications:

Bedford, Eric (*with* Fornaess, John Erik) Local extension of CR functions from weakly pseudoconvex boundaries. **80c:32014**

Fornaess, John Erik *See* **Bedford, Eric, 80c:32014**

Itoh, Mitsuhiro Kähler manifolds with curvature bounded from above by a decreasing function. **80i:53021**

Skoda, Henri Morphismes surjectifs de fibrés vectoriels semi-positifs. **80j:32047**

32F99 None of the above, but in this section

Kiselman, Christer O. Sur la convexité linéelle. **80j:32036**

Schapira, Pierre Conditions de positivité dans une variété symplectique complexe. Applications à l'étude des microfonctions. (English summary) **80k:32025**

Simonženkov, S. D. A generalization of the concept of linear convexity. (Russian) **80f:32015**

Secondary classifications:

Barlet, Daniel Convexité de l'espace des cycles. (English summary) **80m:32018**

Dautov, Š. A. (*with* Henkin, G. M.) Zeros of holomorphic functions of finite order and weighted estimates for the solutions of the $\bar\partial$-equation. (Russian) **80b:32005**

Henkin, G. M. *See* **Dautov, Š. A., 80b:32005**

Šafli, M. Naser Some boundary properties of holomorphic functions of several complex variables. (Russian) **80g:32010**

Skoda, Henri Morphismes surjectifs et fibrés linéaires semi-positifs. **80b:32027**

32Gxx Deformations of analytic structures

32G05 Deformations of complex structures [See also 13D10, 16A58, 58H10, 58H15.]

Axelsson, Reynir (*with* Schumacher, Georg) Analytische Erweiterungen von Produkträumen. **80f:32016**

Bănică, Constantin Sur le complexe cotangent de Lichtenbaum et Schlessinger. (English summary) **80d:32023**

Bogomolov, F. A. Hamiltonian Kählerian manifolds. (Russian) **80c:32024**

Donin, I. F. Deformations of noncompact complex spaces. (Russian) **80c:32025**

Hervier, Y. Déformations à un paramètre de variétés simples. **80g:32037**

Kawamata, Yujiro On deformations of compactifiable complex manifolds. **80c:32026**

Kiremidjian, Garo K. On complex structures with a fixed induced CR structure. **80b:32023**

Miyajima, Kimio On the existence of Kuranishi family for deformations of holomorphic maps. **80a:32017**

Palamodov, V. P. Moduli in versal deformations of complex spaces. **80c:32027**

Schumacher, Georg Beispiele nicht reduzierter Strukturen auf kompakten, komplexen Räumen. **80d:32024**

See also **Axelsson, Reynir, 80f:32016**

Wells, R. O., Jr. Exemples de variations de structures complexes dans les domaines strictement pseudoconvexes. **80h:32040**

Secondary classifications:

Barlet, Daniel Déformations d'ordre un de cycles analytiques. (English summary) **80j:32014**

Carrell, James B. (*with* Sommese, Andrew John) $\mathbf{C}^*$-actions. **80h:32053**

Kiremidjian, Garo K. A Nash-Moser-type implicit function theorem and nonlinear boundary value problems. **80h:58012**

Lieberman, David I. Compactness of the Chow scheme: applications to automorphisms and deformations of Kähler manifolds. **(80h:32056)**
Palamodov, V. P. The tangent complex of an analytic space. (Russian) **(80j:32019)**
Sommese, Andrew John *See* **Carrell, James B., (80h:32053)**

32G07 Deformations of special (e.g. CR) structures

Akahori, Takao Intrinsic formula for Kuranishi's $\bar{\partial}_g^*$. **80g:32038**
Complex analytic construction of the Kuranishi family on a normal strongly pseudoconvex manifold. **80g:32039**
Kuranishi, Masatake On the equivalence of symbols of nondegenerate CR structures. **80j:32037**

Secondary classifications:

Wells, R. O., Jr. Exemples de variations de structures complexes dans les domaines strictement pseudoconvexes. **(80h:32040)**

32G10 Deformations of submanifolds and subspaces

Hirschowitz, André Sur les plongements du type déformation. **80j:32038**

Secondary classifications:

Hénaut, Alain Cycles et cône tangent de Zariski. (English summary) **(80a:32009)**
Kawamata, Yujiro On deformations of compactifiable complex manifolds. **(80c:32026)**

32G11 Deformations of singularities

Secondary classifications:

Ancona, Vincenzo (*with* Tomassini, G.) Théorèmes d'existence pour les modifications analytiques. **(80g:32021)**
Becker, Joseph (*with* Gurjar, Rajendra) Curves with large tangent space. **(80a:32010)**
Behnke, Kurt (*with* Riemenschneider, Oswald) Diedersingularitäten. **(80a:14001)**
Bingener, Jürgen (*with* Flenner, Hubert) Einige Beispiele nichtalgebraischer Singularitäten. **(80j:32013)**
Flenner, Hubert *See* **Bingener, Jürgen, (80j:32013)**
Gurjar, Rajendra *See* **Becker, Joseph, (80a:32010)**
Noui-Mehidi, Samir Queues d'arondes d'une déformation semi-universelle. (English summary) **(80i:32033)**
Riemenschneider, Oswald *See* **Behnke, Kurt, (80a:14001)**
Riemer, Rolf-Ingraban Über eine Klasse von Garben mit isolierter Singularität. **(80c:32011)**
Takijima, Kunio (*with* Tomaru, Tadashi) Local properties of quotient analytic spaces. **(80b:32011)**
Tomaru, Tadashi *See* **Takijima, Kunio, (80b:32011)**
Tomassini, G. *See* **Ancona, Vincenzo, (80g:32021)**

32G13 Analytic moduli problems {For algebraic moduli problems, see 14D20.}

Cathelineau, Jean-Louis Déformations équivariantes d'espaces analytiques complexes compacts. **80a:32018**
Forster, Otto (*with* Knorr, Knut) ★Konstruktion verseller Familien kompakter komplexer Räume. **80h:32041**
Klarès, Bernard Sur la monodromie des systèmes de Pfaff du type de Fuchs sur $P_m(\mathbf{C})$. **80k:32026**
Knorr, Knut *See* **Forster, Otto, 80h:32041**
Norton, V. Alan Analytic moduli of complex vector bundles. **80d:32025**
Sommese, Andrew John Nonsmoothable varieties. **80k:32027**
Sundararaman, D. On the Kuranishi space of a holomorphic principal bundle over a compact complex manifold. **80j:32039**
Szrek, Michał Kählerian deformations of some complex structures. (Russian summary) **80g:32040**
Trautmann, Günther Deformations and moduli of coherent analytic sheaves with finite singularities. **80h:32042**
Deformations of sheaves and bundles. **80d:32026**

Secondary classifications:

Ancona, Vincenzo Algébrisation des modifications analytiques. (Italian and English summaries) **(80i:14004)**
Hirschowitz, André Sur les plongements du type déformation. **(80j:32038)**
Hulek, Klaus Stable rank-2 vector bundles on $\mathbf{P}_2$ with c_1 odd. **(80m:14011)**
Kexel, Werner Zariski-Offenheit von eigentlichen, flachen holomorphen Abbildungen. (English summary) **(80f:32020)**
Le Potier, J. Fibrés stables de rang 2 sur $\mathbf{P}_2(\mathbf{C})$. **(80m:14012)**
Riemer, Rolf-Ingraban Über eine Klasse von Garben mit isolierter Singularität. **(80c:32011)**
Trautmann, Günther Moduli for vectorbundles on $\mathbf{P}_n(\mathbf{C})$. **(80a:14008)**

32G15 Moduli of Riemann surfaces, Teichmüller theory [See also 14H15, 30Fxx.]

Accola, Robert D. M. On certain subloci of Teichmüller space. **80m:32026**
Čučev, V. V. Schottky type spaces (g, s, m). (Russian) **80m:32027**
Earle, Clifford J. Teichmüller theory. **80m:32028**
Gentilesco, James A. Automorphisms of the deformation space of a Kleinian group. **80f:32017**
Jørgensen, T. (*with* Marden, A.; Maskit, B.) The boundary of classical Schottky space. **80k:32028**
Marden, A. *See* **Jørgensen, T.; et al., 80k:32028**
Maskit, B. *See* **Jørgensen, T.; et al., 80k:32028**
Morokuma, Takeshi A characterization of fundamental domains of discontinuous groups acting on real hyperbolic spaces. **80d:32027**
Namba, Makoto Meromorphic functions on compact Riemann surfaces. **80g:32041**
Patterson, David B. The fundamental group of the modulus space. **80g:32042**
Seppälä, Mika Teichmüller spaces of Klein surfaces. **80g:32043**
Zarrow, Robert On Earle's mod n relative Teichmüller spaces. **80a:32019**

Secondary classifications:

Apanasov, B. N. (*with* Tetenov, A. V.) The existence of nontrival quasiconformal deformations of Kleinian groups in space. (Russian) **(80e:30023)**
(Bers, Lipman) *See* **Kruškal', S. L., (80j:30025)**
Buser, Peter The collar theorem and examples. **(80h:53046)**
Čučev, V. V. Some submanifolds of spaces of Koebe groups. (Russian) **(80e:30025)**
Helling, H. Real algebraic models of Teichmüller spaces. **(80h:30043)**
Hubbard, John (*with* Masur, Howard) Quadratic differentials and foliations. **(80h:30047)**
Ioffe, M. S. Some problems of the calculus of variations "in the large" for conformal and quasiconformal imbeddings of Riemann surfaces. (Russian) **(80e:30020)**
Ivaşcu, Dumitru On Klein-Maskit combination theorems. **(80m:30059)**
(Kra, Irwin) *See* **Kruškal', S. L., (80j:30025)**
Kruškal', S. L. ★Quasiconformal mappings and Riemann surfaces. **(80j:30025)**
Masur, Howard *See* **Hubbard, John, (80h:30047)**
Mednyh, A. D. Unramified coverings of compact Riemann surfaces. (Russian) **(80d:30041)**
Sekigawa, Hisao The outradius of the Teichmüller space. **(80a:30052)**
Siebenmann, L. (*with* Sullivan, Dennis) On complexes that are Lipschitz manifolds. **(80h:57027)**
Sullivan, Dennis *See* **Siebenmann, L., (80h:57027)**
Švarcman, O. V. *See* **Vinberg, È. B., (80k:30047)**
Tetenov, A. V. *See* **Apanasov, B. N., (80e:30023)**
Vinberg, È. B. (*with* Švarcman, O. V.) Riemann surfaces. (Russian) **(80k:30047)**
Yamamoto, Hiro-o Squeezing deformations in Schottky spaces. **(80g:30029)**

32G20 Period matrices [See also 14H05.]

Secondary classifications:

Cattani, Eduardo H. (*with* Kaplan, Aroldo G.) Horizontal SL_2-orbits in flag domains. **(80h:32028)**
Earle, Clifford J. Some Jacobian varieties which split. **(80m:14018)**
Griffiths, Phillip A. Complex analysis and algebraic geometry. **(80i:14003)**
Kaplan, Aroldo G. *See* **Cattani, Eduardo H., (80h:32028)**
Peters, Chris On the local Torelli theorem, a review of known results. **(80d:14007)**
Sommese, Andrew John On the rationality of the period mapping. **(80d:14008)**
Švarcman, O. V. *See* **Vinberg, È. B., (80k:30047)**
Vinberg, È. B. (*with* Švarcman, O. V.) Riemann surfaces. (Russian) **(80k:30047)**
Wolf, Joseph A. Completeness of Poincaré series for automorphic cohomology. **(80m:32035)**

32G99 None of the above, but in this section

Secondary classifications:

Trautmann, Günther Deformations of sheaves and bundles. **(80d:32026)**

32Hxx Holomorphic mappings

32H05 Representative domains

Bergman, Stefan On value distribution of an analytic function of two complex variables in a polyhedron. (Russian summary) **80b:32024**
Kanemaru, Tadayoshi A normal domain in matrix spaces. **80j:32040**
Sussmann, Héctor J. Subanalytic sets and feedback control. **80b:34085**

32H10 Bergman kernel function

Bell, Steven R. Nonvanishing of the Bergman kernel function at boundary points of certain domains in $\mathbf{C}^n$. **80j:32041**
Bonami, Aline (*with* Lohoué, Noël) Réduction du calcul du noyau de Szegő d'un domaine D de $\mathbf{C}^n$ au cas d'une mesure simple sur ∂D. (English summary) **80d:32028**
Kakurai, Shigeki On the Lu Qi-Keng conjecture. (Japanese summary) **80i:32053**
Ligocka, Ewa Domains of existence of real analytic functions and the inverse of the Bremermann theorem. (Russian summary) **80e:32018**
Lohoué, Noël *See* **Bonami, Aline, 80d:32028**
Lu, Qi Keng Estimation of intrinsic derivatives of analytic mappings of bounded domains. (Chinese) **80j:32042**

Secondary classifications:

Coifman, Ronald (*with* Rochberg, Richard) Representation theorems for holomorphic and harmonic functions. **(80j:32006)**
Rochberg, Richard *See* **Coifman, Ronald, (80j:32006)**
Solov'ev, A. A. Continuity in L^p of the integral operator with a Bergman kernel. (Russian. English summary) **(80f:47045)**

32H15 Invariant metrics and pseudodistances

Harris, Lawrence A. Schwarz-Pick systems of pseudometrics for domains in normed linear spaces. **80j:32043**
Vesentini, Edoardo Variations on a theme of Carathéodory. **80k:32029**
Methods of differential geometry in functional analysis. (Italian. English summary) **80g:32044**

Secondary classifications:

Bedford, Eric (*with* Fornaess, John Erik) Biholomorphic maps of weakly pseudoconvex domains. **(80d:32016)**
Berg, Gunnar Hyperconvexity and the Carathéodory metric. **(80j:32024)**
Fornaess, John Erik *See* **Bedford, Eric, (80d:32016)**
Lu, Qi Keng Estimation of intrinsic derivatives of analytic mappings of bounded domains. (Chinese) **(80j:32042)**
Suzuki, Masaaki Intrinsic metrics of pseudoconvex domains in $\mathbf{C}^n$. **(80k:32037)**

32H20 Hyperbolic complex manifolds

Fornaess, John Erik The Ahlfors estimate. **80e:32019**
Kobayashi, Shoshichi Complex manifolds with nonpositive holomorphic sectional curvature and hyperbolicity. **80b:32025**

32H25 Picard type theorems and generalizations {For function-theoretic properties, see 32A22.}

Heins, Maurice A realization problem in the theory of analytic curves. **80c:32028**
Sitaramayya, Malladi On Picard and Montel's theorems—a differential geometric aspect. **80f:32018**

Secondary classifications:

Dautov, Š. A. (*with* Henkin, G. M.) Zeros of holomorphic functions of finite order and weighted estimates for the solutions of the $\bar\partial$-equation. (Russian) **(80b:32005)**
Henkin, G. M. *See* **Dautov, Š. A., (80b:32005)**
Mori, Seiki .Holomorphic curves with maximal deficiency sum. **(80h:32006)**

32H30 Value distribution theory in higher dimensions {For function-theoretic properties, see 32A22.}

Lloyd, N. G. Remarks on generalising Rouché's theorem. **80m:32029**
Mori, Seiki The deficiencies and the order of holomorphic mappings of $\mathbf{C}^n$ into a compact complex manifold. **80m:32030**
Sadullaev, A. Valiron defect planes of a holomorphic mapping. (Russian) **80h:32043**
Shiffman, Bernard On holomorphic curves and meromorphic maps in projective space. **80h:32044**
Stoll, Wilhelm A Casorati-Weierstrass theorem for Schubert zeroes of semi-ample holomorphic vector bundles. (Italian summary) **80h:32045**
Tung, Chia Chi Equidistribution theory in higher dimensions. **80h:32047**
Pseudoconvexity and value distribution for Schubert zeroes. **80h:32046**

Secondary classifications:

Molzon, Robert E. Sets omitted by equidimensional holomorphic mappings. **(80m:32004)**
Sibony, Nessim (*with* Wong, Pit Mann) Remarks on the Casorati-Weierstrass theorem. **(80i:32054)**
Wong, Pit Mann *See* **Sibony, Nessim, (80i:32054)**

32H99 None of the above, but in this section

Chądzyński, Jacek Extremum principle for the quotient of plurisubharmonic functions. I. (Polish summary) **80e:32020a**
Extremum principle for the quotient of plurisubharmonic functions. II. (Polish summary) **80e:32020b**
Franz, Friedhelm Heinrich Über die Menge der kritischen Werte gewisser holomorpher Abbildungen. (English summary) **80f:32019**
Higuchi, Teiichi (*with* Tomaru, Tadashi) Some properties of holomorphic mappings into algebraic manifolds. **80j:32044**
Huckleberry, Alan T. (*with* Ormsby, Ellen) Nonexistence of proper holomorphic maps between certain complex manifolds. **80g:32045**
Kexel, Werner Zariski-Offenheit von eigentlichen, flachen holomorphen Abbildungen. (English summary) **80f:32020**
Nakada, Kiyoto (*with* Watanabe, Chikara) A note on a polynomial mapping on $\mathbf{C}^n$. **80h:32048**
Ormsby, Ellen *See* **Huckleberry, Alan T., 80g:32045**
Robba, Philippe Lemmes de Schwarz et lemmes d'approximations p-adiques en plusieurs variables. **80e:32021**
Sibony, Nessim (*with* Wong, Pit Mann) Remarks on the Casorati-Weierstrass theorem. **80i:32054**
Toledo, Domingo (*with* Tong, Yue Lin Lawrence) Duality and intersection theory in complex manifolds. II. The holomorphic Lefschetz formula. **80j:32045**
Tomaru, Tadashi *See* **Higuchi, Teiichi, 80j:32044**
Tong, Yue Lin Lawrence *See* **Toledo, Domingo, 80j:32045**
Uda, Toshio Complex bases of certain semiproper holomorphic maps. **80i:32055**
Watanabe, Chikara *See* **Nakada, Kiyoto, 80h:32048**
Wong, Pit Mann *See* **Sibony, Nessim, 80i:32054**

Secondary classifications:

Aron, Richard M. (*with* Berner, Paul D.) A Hahn-Banach extension theorem for analytic mappings. (French summary) **(80e:46029)**
Berner, Paul D. *See* **Aron, Richard M., (80e:46029)**
(Clancey, Kevin F.) *See* **Šubin, M. A., (80m:46045)**
Cowen, M. J. (*with* Douglas, R. G.) Complex geometry and operator theory. **(80f:47012)**
Demailly, Jean-Pierre Fonctions holomorphes bornées ou à croissance polynomiale sur la courbe $e^x + e^y = 1$. (English summary) **(80e:32002)**
Douglas, R. G. *See* **Cowen, M. J., (80f:47012)**
Fujita, Osamu Sur les systèmes de fonctions holomorphes de plusieurs variables complexes. **(80j:32033)**
Green, Mark L. Metric rigidity of holomorphic maps to Kähler manifolds. **(80h:53068)**
Griffiths, Phillip A. Complex differential and integral geometry and curvature integrals associated to singularities of complex analytic varieties. **(80k:53101)**
Hansen, Vagn Lundsgaard Polynomial covering spaces and homomorphisms into the braid groups. **(80m:32013)**
(Kaballo, Winfried) *See* **Šubin, M. A., (80m:46045)**
Li, Ta Chung Proper self-mappings of the Hartogs triangle. **(80h:32015)**
Palamodov, V. P. The tangent complex of an analytic space. (Russian) **(80j:32019)**
Pinčuk, S. I. Holomorphic mappings of real-analytic hypersurfaces. (Russian) **(80c:32022)**
Stein, Karl Topological properties of holomorphic and meromorphic mappings. **(80i:32056)**
Šubin, M. A. On holomorphic families of subspaces of a Banach space. **(80m:46045)**
(Thijsse, G. Philip A.) *See* **Šubin, M. A., (80m:46045)**
Tsushima, Ryuji Rational maps to varieties of hyperbolic type. **(80g:14019)**

32Jxx Compact analytic spaces {For Riemann surfaces, see 14Hxx, 30Fxx.}

32J05 Compactification

Ueda, Tetsuo Compactifications of $\mathbf{C}\times\mathbf{C}^*$ and $(\mathbf{C}^*)^2$. **80c:32029**

Secondary classifications:

Kawamata, Yujiro On deformations of compactifiable complex manifolds. **(80c:32026)**
Saburi, Yutaka Vanishing theorems of cohomology groups with coefficients in sheaves of holomorphic functions with bounds. **(80e:32012)**
Simha, R. R. Algebraic varieties biholomorphic to $\mathbf{C}^*\times\mathbf{C}^*$. **(80c:14024)**

32J10 Algebraic dependence theorems

Brenton, L. (*with* Morrow, J.) Compactifications of $\mathbf{C}^n$. **80d:32029**
Morrow, J. *See* **Brenton, L., 80d:32029**
Sadullaev, A. Pseudo-algebraic dependence of functions of several variables. (Russian) **80e:32022**
Stein, Karl Topological properties of holomorphic and meromorphic mappings. **80i:32056**

Secondary classifications:

Iitaka, Shigeru Duality theorems for symmetric differential forms. **(80j:14018)**
Schmidt, Walter Cohomologie in q-konvexen Räumen und algebraische Abhängigkeit. **(80i:32048)**

32J15 Compact surfaces

Kilambi, Srinivasacharyulu Sur certaines surfaces analytiques complexes compactes. **80h:32049**
Peters, C. A. M. Holomorphic automorphisms of compact Kähler surfaces and their induced actions in cohomology. **80h:32050**

Secondary classifications:

Bogomolov, F. A. Holomorphic tensors and vector bundles on projective manifolds. (Russian) **(80j:14014)**

32J20 Algebraicity criteria

Chow, Wei Liang On the algebraicity of certain ringed spaces. **80d:32030**
Frankel, R. A differential geometric criterion for Moishezon spaces. **80i:32057**

Secondary classifications:

Lai, Tung Shêng *See* **Nakano, Shigeo, (80m:32025)**
Nakano, Shigeo (*with* Lai, Tung Shêng) An attempt towards the global projective embedding of pseudoconvex manifolds. **(80m:32025)**

32J25 Transcendental methods of algebraic geometry [See also 14C30.]

Parigi, Giuliano La simplification par les variétés de Demazure. (English summary) **80e:32023**

Secondary classifications:

Cattani, Eduardo H. (*with* Kaplan, Aroldo G.) The monodromy weight filtration for a several variables degeneration of Hodge structures of weight two. **(80h:14003)**
Griffiths, Phillip A. Complex analysis and algebraic geometry. **(80i:14003)**

Hirschowitz, André Sur les plongements du type déformation. **(80j:32038)**
Kaplan, Aroldo G. *See* **Cattani, Eduardo H., (80h:14003)**
Koras, Mariusz On actions of an analytic torus. (Russian summary) **(80h:32055)**
Peters, C. A. M. Holomorphic automorphisms of compact Kähler surfaces and their induced actions in cohomology. **(80h:32050)**
Peters, Chris On the local Torelli theorem, a review of known results. **(80d:14007)**
Szrek, Michał Kählerian deformations of some complex structures. (Russian summary) **(80g:32040)**
Wilson, J. C. Differentials of the 2nd kind on a product surface. **(80m:14005)**

32J99 None of the above, but in this section

Secondary classifications:

Abe, Kinetsu On a class of Hermitian manifolds. **(80f:53027)**
Bogomolov, F. A. Hamiltonian Kählerian manifolds. (Russian) **(80c:32024)**
Brotherton, Neil Some parallelizable four-manifolds not admitting a complex structure. **(80e:57022)**
Raynaud, Michel Faisceaux amples et très amples (d'après T. Matsusaka). **(80h:14005)**

32Kxx Generalizations of analytic spaces (should also be assigned at least one other classification number in this section)

32K05 Banach analytic spaces [See also 58Bxx.]

Secondary classifications:

Reiffen, Hans-Jörg (*with* Trapp, Heinz Wilhelm) Ein Beitrag zur Whitney-Regularität im unendlichdimensionalen Fall. **(80g:58008)**
Trapp, Heinz Wilhelm *See* **Reiffen, Hans-Jörg, (80g:58008)**
Vigué, Jean-Pierre Automorphismes analytiques des produits continus de domaines bornés. **(80a:32020)**

32K10 Non-Archimedean analytic spaces

Barteuwerfer, Wolfgang Die höheren metrischen Kohomologiegruppen affinoider Räume. **80h:32051**
Briske, Rainer Glatte Morphismen in der affinoiden Geometrie. **80g:32046**
Heinrich, E. Die Picardgruppen affinoider Algebren und ihrer affinen Reduktionen. **80c:32030**

Secondary classifications:

Bosch, Siegfried Multiplikative Untergruppen in abeloiden Mannigfaltigkeiten. **(80d:14014)**
Chow, Wei Liang On the algebraicity of certain ringed spaces. **(80d:32030)**
Jain, Daulat R. (*with* Jain, Pawan Kumar) Proper bases and homeomorphisms in the space of entire functions of several variables over non-Archimedean fields. (Serbo-Croatian summary) **(80j:46116)**
Jain, Pawan Kumar *See* **Jain, Daulat R., (80j:46116)**

32K15 Differentiable functions on analytic spaces, differentiable spaces [See also 58C25.]

Secondary classifications:

Breuer, M. (*with* Marshall, Ch. D.) Banachian differentiable spaces. **(80b:58010)**
Jurchescu, Martin Variétés mixtes. **(80m:32011)**
Marshall, Ch. D. *See* **Breuer, M., (80b:58010)**

32K99 None of the above, but in this section

32Lxx Holomorphic fiber spaces [See also 55Rxx.]

Secondary classifications:

Rawnsley, J. H. Differential geometry of instantons. **(80d:81081)**

32L05 Holomorphic fiber bundles and generalizations

Elencwajg, G. Submersions holomorphes à fibres isomorphes. **80h:32052**
Des fibrés uniformes non homogènes. **80k:32030**
Gunning, R. C. On the divisor order of vector bundles of rank two on a Riemann surface. **80c:32031**
Laiterer, Ju. Oka's principle for sheaves of infinite-dimensional nonabelian groups. (Russian) **80e:32024**

Secondary classifications:

Atiyah, Michael Francis Geometry of Yang-Mills fields. **(80a:14006)**
Bogomolov, F. A. Holomorphic tensors and vector bundles on projective manifolds. (Russian) **(80j:14014)**
Cowen, M. J. (*with* Douglas, R. G.) Complex geometry and operator theory. **(80f:47012)**
Demailly, Jean-Pierre Différents exemples de fibrés holomorphes non de Stein. **(80e:32008)**
Douglas, R. G. *See* **Cowen, M. J., (80f:47012)**
Ermine, Jean-Louis Conjecture de Serre et espaces hyperconvexes. **(80j:32026)**
Kričever, I. M. (*with* Novikov, S. P.) Holomorphic vector bundles over Riemann surfaces and the Kadomcev-Petviašvili equation. I. (Russian) **(80i:35162)**
Madore, J. (*with* Richard, J. L.; Stora, R.) An introduction to the twistor programme. **(80f:83047)**
Newman, Ezra T. (*with* Porter, John R.; Tod, K. P.) Twistor surfaces and right-flat spaces. **(80a:83021)**
Novikov, S. P. *See* **Kričever, I. M., (80i:35162)**
Porter, John R. *See* **Newman, Ezra T.; et al., (80a:83021)**
Rees, Elmer Some rank two bundles on $P_n\mathbf{C}$, whose Chern classes vanish. **(80f:55016)**
Richard, J. L. *See* **Madore, J.; et al., (80f:83047)**
Stora, R. *See* **Madore, J.; et al., (80f:83047)**
Switzer, Robert M. Complex 2-plane bundles over complex projective space. **(80j:55022)**
Tod, K. P. *See* **Newman, Ezra T.; et al., (80a:83021)**

32L10 Sheaves and cohomology of sections of holomorphic vector bundles, general results [See also 18F20, 55N30.]

Leiterer, Jürgen Banach coherent analytic Fréchet sheaves. **80h:32026**
Matsushima, Yozo On the intermediate cohomology group of a holomorphic line bundle over a complex torus. **80j:32046**

Secondary classifications:

Barth, Wolf (*with* Elencwajg, G.) Concernant la cohomologie des fibres algébriques stables sur $\mathbf{P}_n(\mathbf{C})$. **(80f:14004)**
Elencwajg, G. *See* **Barth, Wolf, (80f:14004)**
Fischer, Hans R. (*with* Williams, Floyd L.) Complex-foliated structures. I. Cohomology of the Dolbeault-Kostant complexes. **(80g:58006)**
Holmann, Harald On the stability of holomorphic foliations with all leaves compact. **(80b:57023)**
Leiterer, Jürgen Banach coherence and Oka's principle. **(80c:32010)**
Mulase, Motohico Poles of instantons and jumping lines of algebraic vector bundles on $\mathbf{P}^3$. **(80f:14008)**
Oprolu, Vasile The d''-Chern classes of the complex vector bundles. **(80f:53041)**
Rasmussen, Ole Hjorth Exotic characteristic classes for holomorphic foliations. **(80d:57015)**
Rawnsley, J. H. Flat partial connections and holomorphic structures in C^∞ vector bundles. **(80g:58007)**
Riemer, Rolf-Ingraban Über eine Klasse von Garben mit isolierter Singularität. **(80c:32011)**
Wells, R. O., Jr. Complex manifolds and mathematical physics. **(80h:32001)**
Williams, Floyd L. *See* **Fischer, Hans R., (80g:58006)**

32L15 Bundle convexity [See also 32F10.]

Drucker, Daniel S. Une description explicite des orbites dans les espaces hermitiens symétriques irréductibles compacts exceptionnels. (English summary) **80e:32025**
Skoda, Henri Morphismes surjectifs de fibrés vectoriels semi-positifs. **80j:32047**

Secondary classifications:

Schmidt, Walter Cohomologie in q-konvexen Räumen und algebraische Abhängigkeit. **(80i:32048)**

32L20 Vanishing theorems

Dolbeault, Pierre Un théorème d'annulation sur les variétés faiblement l-complètes. **80m:32031**

Secondary classifications:

Kobayashi, Shoshichi First Chern class and holomorphic tensor fields. **(80m:53050)**
Schmidt, Walter Cohomologie in q-konvexen Räumen und algebraische Abhängigkeit. **(80i:32048)**
Vauthier, Jacques Théorèmes d'annulation et de finitude d'espaces de 1-formes harmoniques sur une variété de Riemann ouverte. (English summary) **(80j:58069)**
Vladimirov, A. A. Methods of calculating many-loop diagrams and renormalization group analysis of φ^4-theory. (Russian. English summary) **(80c:81090)**

32L99 None of the above, but in this section

Skoda, Henri Morphismes surjectifs et fibrés linéaires semi-positifs. **80h:32027**
Suzuki, Osamu The problems of Riemann and Hilbert and the relations of Fuchs in several complex variables. **80k:32031**

Secondary classifications:

Curtis, W. D. (*with* Lerner, D. E.; Miller, F. R.) Some remarks on the nonlinear graviton. **(80i:83026)**
Lerner, D. E. *See* **Curtis, W. D.; et al., (80i:83026)**
Marry, Pierre (*with* Verdier, Jean-Louis) Quelques problèmes d'intersections en géométrie riemannienne. **(80c:57012)**
Mattei, Jean-François (*with* Moussu, Robert) Intégrales premières d'une forme de Pfaff analytique. (English summary) **(80h:58003)**
Miller, F. R. *See* **Curtis, W. D.; et al., (80i:83026)**
Moussu, Robert *See* **Mattei, Jean-François, (80h:58003)**
Stoll, Wilhelm A Casorati-Weierstrass theorem for Schubert zeroes of semi-ample holomorphic vector bundles. (Italian summary) **(80h:32045)**
Suzuki, Masakazu Sur les opérations holomorphes de $\mathbf{C}$ et de $\mathbf{C}^*$ sur un espace de Stein. **(80h:32057)**
Sur les intégrales premières de certains feuilletages analytiques complexes. **(80h:57038)**
Verdier, Jean-Louis *See* **Marry, Pierre, (80c:57012)**

32Mxx Complex spaces with a group of automorphisms

32M05 Complex Lie groups, automorphism groups of complex spaces [See also 22E10.]

Ando, Kiyoshi (*with* Mizuno, Hirobumi) On certain discontinuous groups. II. (Japanese. English summary) **80k:32032**
Carrell, James B. (*with* Sommese, Andrew John) C^*-actions. **80h:32053**
(*with* Sommese, Andrew John) Some topological aspects of C^* actions on compact Kaehler manifolds. **80m:32032**
Hayes, Sandra Weakly homogeneous infinite-dimensional manifolds. **80k:32054**
Koras, Mariusz On actions of an analytic torus. (Russian summary) **80h:32055**
Lieberman, David I. Compactness of the Chow scheme: applications to automorphisms and deformations of Kähler manifolds. **80h:32056**
Mizuno, Hirobumi *See* **Ando, Kiyoshi, 80k:32032**
Sommese, Andrew John *See* **Carrell, James B., 80h:32053** *and* **Carrell, James B., 80m:32032**
Suzuki, Masakazu Sur les opérations holomorphes de C et de C^* sur un espace de Stein. **80h:32057**
Vigué, Jean-Pierre Automorphismes analytiques des produits continus de domaines bornés. **80a:32020**

Secondary classifications:

Beloshapka, V. K. The dimension of the group of automorphisms of an analytic hypersurface. (Russian) **(80h:32039)**
Braun, Robert (*with* Kaup, Wilhelm; Upmeier, Harald) On the automorphisms of circular and Reinhardt domains in complex Banach spaces. **(80g:32003)**
Chikashige, Yüichi (*with* Fujii, Yasunori; Mima, Kotaro) Lorentz invariant string regularized dimensionally by means of hyperfunctions. II. **(80a:81083)**
Fujii, Yasunori *See* **Chikashige, Yüichi; et al., (80a:81083)**
Kaup, Wilhelm *See* **Braun, Robert; et al., (80g:32003)**
Mima, Kotaro *See* **Chikashige, Yüichi; et al., (80a:81083)**
Upmeier, Harald *See* **Braun, Robert; et al., (80g:32003)**

32M10 Homogeneous complex manifolds [See also 14M17, 57T15.]

Brun, Jérôme Sur la simplification par les grassmanniennes. **80h:32058**
Cattani, Eduardo H. (*with* Kaplan, Aroldo G.) Horizontal SL_2-orbits in flag domains. **80b:32028**
Dorfmeister, Josef Inductive construction of homogeneous cones. **80h:32059**
Gilligan, B. (*with* Huckleberry, Alan T.) On non-compact complex nil-manifolds. **80a:32021**
Harris, Lawrence A. Operator Siegel domains. **80g:32047**
Huckleberry, Alan T. *See* **Gilligan, B., 80a:32021**
Itoh, Mitsuhiro A remark on nonnegatively curved homogeneous Kähler manifolds. **80g:32048**
Kaplan, Aroldo G. *See* **Cattani, Eduardo H., 80b:32028**
Lundquist, R. Zelow On the geometry of some Siegel domains. **80m:32033**
Pjateckiĭ, V. S. Convex cones of T-finite type. (Russian) **80f:32021**
Satake, I. La déformation des formes hermitiennes et son application aux domaines de Siegel. **80i:32058**
Takeuchi, Masaru Homogeneous Kähler submanifolds in complex projective spaces. **80i:32059**
Vigué, Jean-Pierre Frontière des domaines bornés cerclés homogènes. (English summary) **80c:32032**
Xu, Yi Chao Siegel domains of the first kind over square cones. (Chinese. English summary) **80j:32048**
Classification of square type domains. **80i:32060**

Secondary classifications:

Dorfmeister, Josef (*with* Koecher, Max) Reguläre Kegel. **(80i:17019)**
Peirce-Zerlegungen und Jordan-Strukturen zu homogenen Kegeln. **(80k:17012)**
Algebraic description of homogeneous cones. **(80j:53049)**
Kimel'fel'd, B. N. Reductive subgroups of orthogonal groups that are locally transitive on flag manifolds. (Russian. Georgian and English summaries) **(80g:53038)**
Koecher, Max *See* **Dorfmeister, Josef, (80i:17019)**
Komrakov, B. P. ★Структуры на многообразиях и однородные пространства. (Russian) [Structures on manifolds and homogeneous spaces] **(80h:53001)**
Laville, Guy Sur le calcul de la fonction conjuguée à plusieurs variables complexes. (English summary) **(80d:32015)**
Lundquist, R. Zelow Holomorphic sectional curvature of quasisymmetric domains. **(80h:53071)**
Malyšev, F. M. Decompositions of nilpotent Lie algebras. (Russian) **(80m:17004)**
Sugawara, Tamio Nonimmersion and nonembedding theorems for complex Grassmann manifolds. **(80j:57027)**
Watanabe, Toshihiro On the spectral representation of holomorphic functions on some domain. **(80k:32002)**
Zhang, Qing Yu Almost complex homogeneous manifolds. (Chinese. English summary) **(80k:53060)**

32M15 Hermitian symmetric spaces, bounded symmetric domains [See also 22E10, 22E40, 53C35, 57T15.]

Borel, Armand Symmetric compact complex spaces. **80k:32033**
Ch'ên, Wu Yung Remarks on H^p spaces over bounded symmetric domains. **80d:32031**
Jaffee, H. A. Anti-holomorphic automorphisms of the exceptional symmetric domains. **80j:32049**
Johnson, Kenneth D. Differential equations and the Bergman-Šilov boundary on the Siegel upper half plane. **80d:32032**
Kaiser, Gerald Hardy spaces associated with the Poincaré group. **80c:32033**
Kimel'fel'd, B. N. Quasihomogeneous domains on a conformal sphere. (Russian) **80c:32034**
Kimura, Yoshio On the hypersurfaces of Hermitian symmetric spaces of compact type. **80h:32060**
A hypersurface of the irreducible Hermitian symmetric space of type E III. **80h:32061**
Korányi, Adam (*with* Vági, Stephen) Rational inner functions on bounded symmetric domains. **80h:32062**
Lassalle, Michel Sur la géométrie des espaces hermitiens symétriques: le cas du type tube. (English summary) **80a:32022**
Sur la géométrie des espaces hermitiens symétriques: le cas général. (English summary) **80m:32034**
Les orbites d'un espace hermitien symétrique compact. **80k:32034**
Vági, Stephen *See* **Korányi, Adam, 80h:32062**

Secondary classifications:

Chen, Bang-yen (*with* Vanhecke, Lieven; Verstraelen, Leopold) Complex submanifolds of some Hermitian symmetric spaces. **(80m:53040)**
Holonomy groups of normal bundles. **(80a:53058)**
Eymard, Pierre Le noyau de Poisson et la théorie des groupes. **(80b:22014)**
Kobayashi, Shoshichi Projective invariant metrics for Einstein spaces. **(80k:53075)**
Korányi, Adam A survey of harmonic functions on symmetric spaces. **(80k:43012)**
Lassalle, Michel Séries de Laurent des fonctions holomorphes dans la complexification d'un espace symétrique compact. **(80f:22006)**
Sun, Ji Guang Harmonic functions on a class of real classical domains. (Chinese) **(80j:31008)**
Vanhecke, Lieven *See* **Chen, Bang-yen; et al., (80m:53040)**
Verstraelen, Leopold *See* **Chen, Bang-yen; et al., (80m:53040)**

32M99 None of the above, but in this section

Nakajima, Kazufumi On equivariant holomorphic imbeddings of Siegel domains to compact complex homogeneous spaces. **80k:32035**

32Nxx Automorphic functions [See also 10Dxx, 20H10, 22E40, 30F35.]

32N05 General theory of automorphic functions of several complex variables

Ando, Kiyoshi (*with* Mizuno, Hirobumi) On certain discontinuous groups. I. (Japanese. English summary) **80f:32022**
Mizuno, Hirobumi *See* **Ando, Kiyoshi, 80f:32022**

Secondary classifications:

Grosche, Jürgen Über verallgemeinerte Hermitesche Modulgruppen. **(80a:10038)**
Koizumi, Shoji On equations defining abelian varieties and modular functions. **(80e:14017)**
Morokuma, Takeshi A characterization of fundamental domains of discontinuous groups acting on real hyperbolic spaces. **(80d:32027)**
Ts'ao, Liang Chi Saturation problem for Hilbert modular groups. **(80f:10028)**

32N10 Automorphic forms

Wolf, Joseph A. Completeness of Poincaré series for automorphic cohomology. **80m:32035**

Secondary classifications:

Freitag, Eberhard Der Körper der Siegelschen Modulfunktionen. **(80e:10025)**
Ein Verschwindungssatz für automorphe Formen zur Siegelschen Modulgruppe. **(80e:10026)**
Hall, Rita On the cohomology of Kuga's fiber variety. **(80a:10041)**
Kurčanov, P. F. The cohomology of discrete groups and Dirichlet series that are related to Jacquet-Langlands cusp forms. (Russian) **(80b:10038)**
Resnikoff, H. L. (*with* Tai, Y.-S.) On the structure of a graded ring of automorphic forms on the 2-dimensional complex ball. **(80h:10037)**
Tai, Y.-S. *See* **Resnikoff, H. L., (80h:10037)**

32N15 Automorphic functions in symmetric domains

Secondary classifications:

Karel, M. Eisenstein series and fields of definition. **(80c:10028)**

32N99 None of the above, but in this section

33-XX SPECIAL FUNCTIONS {33-XX deals with the properties of functions as functions. General systems of orthogonal functions are treated in 42C05. Expansions in orthogonal functions are treated in 42C10, 42C15.}

33-01 Elementary exposition, textbooks

Suetin, P. K. ★Классические ортогональные многочлены. (Russian) [Classical orthogonal polynomials] **80h:33001**

Secondary classifications:

(Bryčkov, Ju. A.) *See* Oliver, F., (80a:41031)
Flügge, Siegfried ★Mathematische Methoden der Physik. I. (80m:00001)
Olver, F. ★Введение в асимптотические методы и специальные функции. (Russian) [Introduction to asymptotics and special functions] (80a:41031)
(Prudnikov, A. P.) *See* Oliver, F., (80a:41031)

33–02 Advanced exposition (research surveys, monographs, etc.)

33–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Bottema, O. (*with* Grootendorst, A. W.) A thesis of 1834. (80k:01029)
Grootendorst, A. W. *See* Bottema, O., (80k:01029)
(Ruch, Adolf Stephanus) *See* Bottema, O.; et al., (80k:01029)

33–04 Explicit machine computation and programs (not the theory of computation or programming)

Sugiyama, Takakazu ★Coefficients of zonal polynomials of order two. 80e:33001

Secondary classifications:

Ghaderpanah, S. S. *See* Leung, K. V., (80e:65024)
Leung, K. V. (*with* Ghaderpanah, S. S.) An application of the finite element approximation method to find the complex zeros of the modified Bessel function $K_\nu(z)$. (80e:65024)

33–06 Proceedings, conferences, etc.

33A10 Exponential and trigonometric functions

Luke, Yudell L. Some approximations and inequalities for arc tan and ln. (Spanish summary) 80h:33002
Zucker, I. J. The summation of series of hyperbolic functions. 80b:33001

Secondary classifications:

Ramos, Zenaida E. An integral expression for the generalized Kummer sum. (80k:10032)

33A15 Gamma and beta functions

Askey, Richard The q-gamma and q-beta functions. 80h:33003
Castoldi, Luigi The derivative of the gamma function for positive integers as values of the variables. (Italian. English summary) 80g:33001
Chang, Der Shin A note on incomplete-beta-function. 80k:33001
Imoru, Christopher Olutunde A note on an inequality for the gamma function. 80a:33001
Kabe, D. G. On some inequalities satisfied by beta and gamma functions. 80d:33001
Kreyszig, Erwin Über eine mit der Psi-Funktion verwandte Funktion. 80j:33001
van de Lune, J. ★Some convexity properties of Euler's gamma function. 80l:33001
Temme, N. M. The asymptotic expansion of the incomplete gamma functions. 80l:33002

33A20 Error function, probability integral

Adel Sharaf, Mohamed General integral transform of the exponential integrals. 80j:33002

Secondary classifications:

Hadži, P. I. Sums with cylindrical functions that reduce to the probability function and to related functions. (Russian) (80h:33016)

33A25 Elliptic functions and integrals

Dumont, Dominique A combinatorial interpretation for the Schett recurrence on the Jacobian elliptic functions. 80l:33003
Fempl, Stanimir Über eine Kurve deren Quadratur auf ein hyperelliptisches Integral führt. 80k:33002
Matsuda, Akira An algebraic addition-theorem for Weierstrass' elliptic function and nomograms. (Czech and Russian summaries) 80l:33004

Secondary classifications:

Reyssat, Éric Mesures de transcendance de nombres liés aux fonctions elliptiques. (80m:10024)
Šidlovskiĭ, A. B. On the estimates of the algebraic independence measures of the values of E-functions. (80m:10027)
Zucker, I. J. The summation of series of hyperbolic functions. (80b:33001)

33A30 Simple hypergeometric functions of one and several variables

Abiodun, R. F. A. An extension of Carlitz's formula. 80m:33001
An application of Carlitz's formula. 80f:33001
Agrawal, Hukum Chand A note on the A^*-function. (Hindi. English summary) 80g:33002
Ahmed, Shafique On the zeros of confluent hypergeometric functions. I. An infinite system of nonlinear equations. 80k:33003a
On the zeros of confluent hypergeometric functions. II. Higher-order nonlinear equations and sum rules. 80k:33003b
Andrews, George E. (*with* Askey, Richard) A simple proof of Ramanujan's summation of the ${}_1\psi_1$. 80h:33004
Askey, Richard (*with* Ismail, Mourad E.-H.) The very well poised ${}_6\psi_6$. 80m:33002
See also Andrews, George E., 80h:33004
Bhati, S. S. *See* Singhal, J. P., 80k:33006
Chandwani, G. N. A generating function for the polynomial of the form F_3. (Hindi. English summary) 80m:33003
Chaurasia, V. B. L. On the generalized Lauricella function. II. 80g:33003
Conn, Robert W. *See* Detrich, John, 80c:33001
Crothers, D. S. F. Comment on: "Asymptotic expansions for parabolic cylinder functions" (J. Phys. B 11 (1978), no. 18, L531–L533) by C. Lozano and F. W. J. Olver. 80g:33008
Dange, A. V. Few transformations for triple hypergeometric function. (Hindi. English summary) 80m:33004
Dave, C. K. Generating functions for polynomials of two variables. IV. 80e:33002
Deshpande, V. L. An integral representation for triple hypergeometric function H_B. 80k:33004
Detrich, John (*with* Conn, Robert W.) Finite sum evaluation of the Gauss hypergeometric function in an important special case. 80c:33001
Dixit, L. A. An inversion integral involving the confluent hypergeometric function. (Hindi. English summary) 80g:33004
Do Tan Si Representation of special functions by differintegral and hyperdifferential operators. 80d:33002
Exton, Harold *See* Srivastava, Hari M., 80m:33011
Garg, O. P. (*with* Kothari, R. S.) Some integral relations for the H-function of two variables with application. (Hindi. English summary) 80m:33005
Goyal, S. P. (*with* Vasishta, S. K.) Unified expansion formula for the H-function of two variables. 80g:33005
Ismail, Mourad E.-H. (*with* Kelker, Douglas H.) Special functions, Stieltjes transforms and infinite divisibility. 80k:33005
See also Askey, Richard, 80m:33002
Jain, Sudha *See* Prabhakar, T. R., 80f:33005 *and* Prabhakar, T. R., 80m:33008
Kelker, Douglas H. *See* Ismail, Mourad E.-H., 80k:33005
Kothari, R. S. *See* Garg, O. P., 80m:33005
Kuiken, Kathryn Heun's equation and the hypergeometric equation. 80g:33006
Lozano, C. (*with* Olver, F.) Asymptotic approximations for parabolic cylinder functions. 80g:33007
See also Crothers, D. S. F., 80g:33008
Mahajan, R. R. (*with* Saxena, Rajendra K.) Some finite integrals and Fourier sine series for a generalized function of two variables. II. (Hindi. English summary) 80e:33003
Maheshwari, N. K. *See* Pradhan, K. M., 80m:33009
Olver, F. *See* Lozano, C., 80g:33007 *and* Crothers, D. S. F., 80g:33008
Ortner, N. The value of a definite integral. 80e:33002
Pandey, R. N. *See* Singh, Ramji, 80f:33007 *and* Singh, Ramji, 80m:33010
Pathak, Ram Shankar Zeros of a cross product of Whittaker functions. I. $|m|$ large. 80g:33009
Pathan, M. A. On some transformations of triple hypergeometric series $F^{(3)}$. III. 80a:33002
On multiplication formula for hypergeometric functions. 80b:33002
On finite double summations of Whittaker's function $W_{\lambda,m}(x)$. 80g:33010
A note on the generalization of the summation formulas for Appell's and Kampé de Fériet's hypergeometric functions. 80m:33006
On a transformation of a general hypergeometric series of four variables. 80m:33007
Prabhakar, T. R. (*with* Jain, Sudha) A set of polynomials relevant to problems in quantum mechanics. 80m:33008
(*with* Jain, Sudha) Some bilateral generating functions for a general class of polynomials relevant to quantum mechanics. (Hindi. English summary) 80f:33005
Pradhan, K. M. Integrals representing the products of Kampé de Fériet's function and A^*-function. (Hindi. English summary) 80e:33004
(*with* Maheshwari, N. K.) Certain relations involving a generalized hypergeometric function and the Legeadre function with applications. (Hindi. English summary) 80m:33009
Saxena, Rajendra K. *See* Mahajan, R. R., 80e:33003
Sharma, R. K. Summation formulae for ${}_2F_1(\frac{1}{2})$. 80a:33003
Another Watson's theorem for double series. (Spanish summary) 80h:33005
Relations between double series and single series. 80f:33002
Transformation formulae for hypergeometric series of two variables. I. 80f:33006
Shukla, D. P. A note on generating relations for Lauricella's function of several variables. 80f:33003
Singh, Ramji (*with* Pandey, R. N.) A general differential equation for classical polynomials. (Hindi. English summary) 80f:33007
(*with* Pandey, R. N.) An effort towards unification of classical polynomials. (Hindi. English summary) 80m:33010
Singhal, B. M. Some identities and hypergeometric functional relations. 80f:33008
Singhal, J. P. (*with* Bhati, S. S.) Triple Whittaker transforms of generalised hypergeometric functions. (Hindi. English summary) 80k:33006
Srivastava, Hari M. A Watsonian theorem for multiple series. 80f:33009
(*with* Exton, Harold) A generalization of the Weber-Schafheitlin integral. 80m:33011
A note on certain identities involving generalized hypergeometric series. 80f:33010
Sud, A. R. (*with* Sud, K. K.) Analytic continuations of the Lauricella function. 80c:33003
Sud, K. K. *See* Sud, A. R., 80c:33003
Temme, N. M. Uniform asymptotic expansions of confluent hypergeometric functions. 80a:33004

Vasishta, S. K. *See* **Goyal, S. P., 80g:33005**

Secondary classifications:

Andrews, George E. An introduction to Ramanujan's "lost" notebook. **(80e:01018)**
Chhabra, S. P. *See* **Joshi, B. K., (80g:45011)**
Dwivedi, A. P. (*with* Singh, V. B.) A formal solution of simultaneous triple integral equations involving H-function of n variables $H(x_n)$. **(80h:45003)**
Hille, Einar Hypergeometric functions and conformal mapping. **(80j:30030)**
Hinton, F. L. Stokes multipliers for a class of ordinary differential equations. **(80m:34055)**
Joshi, B. K. (*with* Chhabra, S. P.) Inversion of an integral equation involving hypergeometric function ${}_2F_2$. (Hindi. English summary) **(80g:45011)**
Kabe, D. G. On some inequalities satisfied by beta and gamma functions. **(80d:33001)**
On Subrahmaniam's conjecture for an integral involving zonal polynomials. **(80k:62071)**
Mazoni, P. Sur quelques relations intégrales entre les solutions de l'équation biconfluente de Heun. **(80k:33020)**
Maurya, R. P. *See* **Prasad, Y. N., (80m:44012)**
Natanzon, G. A. General properties of potentials for which the Schrödinger equation is solvable by means of hypergeometric functions. (Russian. English summary) **(80g:81014)**
Prasad, Y. N. (*with* Maurya, R. P.) On a generalized multiple L-H transform. (Hindi. English summary) **(80m:44012)**
(Ramanujan, Srinivasa) *See* **Andrews, George E., (80e:01018)**
Rathie, Navratna Integrals involving the H-function. (Hindi. English summary) **(80m:33014)**
Sharma, S. D. An integral transform involving two generalised H-functions. **(80h:44006)**
Singh, V. B. *See* **Dwivedi, A. P., (80h:45003)**
Singhal, B. M. Operational techniques with certain double generalized transform. **(80j:44007)**
Sobol', G. P. (*with* Sobol', I. M.) Hypergeometric functions and ordinary linear differential equations with exponential coefficients. (Russian) **(80f:34009)**
Sobol', I. M. *See* **Sobol', G. P., (80f:34009)**
Takano, Kyoichi A reduction theorem for a linear Pfaffian system with regular singular points. **(80f:58005)**
Zăgănescu, M. The incomplete beta-function in the theory of the Veneziano-function. (Romanian summary) **(80e:81097)**

33A35 Generalized hypergeometric functions of one and several variables, (E-functions, G-functions, H-functions, etc.)

Agrawal, Hukum Chand On hypergeometric functions of three variables. (Hindi. English summary) **80e:33005**
Anandani, P. An expansion formula for the H-function involving Jacobi polynomials. **80f:33004**
Andrews, George E. Connection coefficient problems and partitions. **80c:33004**
Arora, J. L. On Poisson's sine formula. **80j:33003**
Chaurasia, V. B. L. Application of H-function of two variables in heat conduction. **80f:33005**
Deshpande, V. L. A theorem on Laplace transform and its applications. **80f:33006**
Garg, O. P. On multiplication formulae for Fox's H-function. **80h:33006**
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Ghosh, Debidas A definite integral involving associated Legendre function of the first kind. **80f:33007**
Goyal, S. P. (*with* Vashishta, S. K.) An expansion formula for the H-function of two variables. (Hindi. English summary) **80h:33007**
Integrals involving the H-function of two variables. (Hindi. English summary) **80h:33008**
See also **Gupta, K. C., 80c:33005** *and* **Vasishta, S. K., 80f:33009**
Gupta, K. C. (*with* Garg, O. P.) On finite summation formulae for the H-function of two variables. **80a:33005**
(*with* Goyal, S. P.) Double finite summation formulas for the H-function of two variables. **80c:33005**
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Handa, S. On double infinite series involving the H-function of two variables. **80c:33006**
Joshi, C. M. *See* **Verma, A., 80i:33012**
Koul, C. L. *See* **Raina, R. K., 80m:33013**
Krishna, Shri *See* **Mathur, B. L., 80a:33008**
Mahajan, G. B. Transformation formula involving double hypergeometric series. **80a:33006**
Mahajan, R. R. (*with* Saxena, Rajendra K.) On summation of some double series of S-function. **80j:33004**
Mathai, A. M. (*with* Saxena, Ram Kishore) ★The H-function with applications in statistics and other disciplines. **80a:33007**
Mathur, B. L. (*with* Krishna, Shri) Some results involving the multiple H function. **80a:33008**
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Pathan, M. A. On finite summations. **80j:33005**
On some transformations of Kampé de Fériet's function. **80g:33012**
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Prasad, Y. N. (*with* Singh, S. N.) Some higher operational techniques in the theory of special functions. **80h:33010**
See also **Yadav, J. M. S., 80h:33013**
Raina, R. K. (*with* Koul, C. L.) On certain integral relations involving the H-function of two variables. **80m:33013**
On the repeated differentiation of the H-function of two variables. (Hindi. English summary) **80f:33008**
Rathie, A. K. An integral involving the H-function and the Kampé de Fériet function. (Hindi. English summary) **80h:33011**
Rathie, Navratna Integrals involving the H-function. (Hindi. English summary) **80m:33014**
Saxena, Rajendra K. *See* **Mahajan, R. R., 80j:33004**
Saxena, Ram Kishore *See* **Mathai, A. M., 80a:33007**
Shah, Manilal A new expansion theorem on Fox's H-function of two variables. **80j:33006**
Sharma, Bhagirath Lal On the generalised function of two variables. III. **80a:33009**
Sharma, Shobha Some more generalized generating functions theorems. **80i:33011**
Siddiqui, A. Use of the H-function of several variables in the solution of a boundary value problem in heat conduction. (Hindi. English summary) **80h:33012**
Integral involving the H-function of several variables and an integral function of two complex variables. **80j:33007**
Singh, Namprasad Some inequalities for the H-function. (Hindi. English summary) **80a:33010**
Singh, S. N. *See* **Prasad, Y. N., 80h:33010**
Srivastava, Aruna *See* **Srivastava, Hari M., 80b:33003**
Srivastava, H. S. P. Some identities for the H-function of two variables. (Hindi. English summary) **80e:33006**
Integrals involving generalized Legendre functions and a generalized function of two variables. (Hindi. English summary) **80j:33009**
Srivastava, Hari M. (*with* Srivastava, Aruna) A new class of orthogonal expansions for the H-function of several complex variables. **80b:33003**
A note on certain summation theorems for multiple hypergeometric series. **80a:33011**
(*with* Srivastava, Rekha) Some multiple integral transformations involving the H-function of several variables. **80j:33008**
Srivastava, Rekha *See* **Srivastava, Hari M., 80j:33008**
Srivastava, Triloki Nath Some integrals involving generalized H-function of Fox. **80m:33015**
Vashishta, S. K. *See* **Goyal, S. P., 80h:33007**
Vasishta, S. K. (*with* Goyal, S. P.) On expansions of the H-function of two variables. (Hindi. English summary) **80f:33009**
Verma, A. (*with* Joshi, C. M.) Some remarks on summation of basic hypergeometric series. **80i:33012**
Verma, R. U. On the H-function of two variables. III. **80m:33016**
Yadav, J. M. S. (*with* Prasad, Y. N.) Some infinite integrals involving generalized functions of r variables. (Hindi. English summary) **80h:33013**

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Dwivedi, A. P. (*with* Singh, V. B.) Simultaneous triple integral equations associated with H-function. **(80a:45011)**
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Koranne, V. D. (*with* Saxena, Rajendra K.) Some double integral transformation of the H-function. (Hindi. English summary) **(80m:44011)**
Lingappaiah, G. S. On some general distributions in terms of generalized functions. **(80m:62017)**
Maheshwari, N. K. *See* **Pradhan, K. M., (80m:33009)**
Maurya, R. P. *See* **Prasad, Y. N., (80j:44008)**
Pandey, R. N. *See* **Singh, Ramji, (80m:33010)**
Pathak, Ram Shankar Formal solution of dual integral equations involving H-functions. **(80a:45013)**
Pathan, M. A. On a transformation of a general hypergeometric series of four variables. **(80m:33007)**
Pradhan, K. M. (*with* Maheshwari, N. K.) Certain relations involving a generalized hypergeometric function and the Legendre function with applications. (Hindi. English summary) **(80m:33009)**
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Saxena, Ram Kishore (*with* Dash, S. P.) The distribution of the linear combination and of the ratio of products of independent random variables associated with an H-function. (Hindi. English summary) **(80f:62022)**
Sharma, J. P. *See* **Dwivedi, A. P., (80f:45012)**
Singh, Namprasad H-function of two variables and temperature in an inhomogeneous bar. (Hindi. English summary) **(80e:80007)**
Singh, Ramji (*with* Pandey, R. N.) An effort towards unification of classical polynomials. (Hindi. English summary) **(80m:33010)**
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33A40 Cylindrical functions, Bessel functions

Bondarenko, V. F. (*with* Ivanov, E. A.; Mošinskiĭ, A. V.) The calculation of series close to the Schlömilch series with the aid of Kummer's method. (Russian. English summary) **80d:33003**
Glasser, M. L. A note on the integral $\int_0^\infty t^{2\alpha-1}(1+t^2)^{1-\alpha-\beta}J_\nu(x\sqrt{(1+t^2)})dt$. **80d:33004**
Grecchi, Vincenzo Zeros of Bessel functions by means of the Trefftz-Fichera orthogonal invariants method through the Schrödinger equation. (Italian summary) **80f:33010**

Grosswald, Emil ★Bessel polynomials. **80i:33013**

Ismail, Mourad E.-H. (*with* May, C. Ping) Special functions, infinite divisibility and transcendental equations. **80d:33005**

Ivanov, E. A. *See* **Bondarenko, V. F.; et al., 80d:33003**

Lorch, Lee Turánians and Wronskians for the zeros of Bessel functions. **80m:33017**

May, C. Ping *See* **Ismail, Mourad E.-H., 80d:33005**

Moiinskiĭ, A. V. *See* **Bondarenko, V. F.; et al., 80d:33003**

Muldoon, M. E. On the zeros of a cross-product of Bessel functions of different orders. **80k:33008**

Obi, E. C. A note on the Rayleigh polynomials. **80j:33010**

Ostapenko, N. A. Some definite integrals of Bessel functions. (Russian. English summary) **80h:33014**

Rawlins, A. D. A Bessel function inequality. **80e:33007**

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Baldwin, P. Uniform approximations to solutions of a linear second-order differential equation outside a vanishingly small region containing two asymptotically coincident transition points. **(80j:34070)**

Belevitch, V. V. (*with* Boersma, J.) The Bessel ratio $K_{\nu+1}(z)/K_\nu(z)$ as a passive impedance. **(80f:94032)**

Boersma, J. *See* **Belevitch, V. V., (80f:94032)**

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Deshpande, V. L. A theorem on Laplace transform and its applications. **(80f:33006)**

Èskin, L. D. Special functions of the theory of rôtational diffusion. (Russian) **(80d:76089)**

Ismail, Mourad E.-H. (*with* Kelker, Douglas H.) Special functions, Stieltjes transforms and infinite divisibility. **(80k:33005)**

Kelker, Douglas H. *See* **Ismail, Mourad E.-H., (80k:33005)**

Ol'šaneckiĭ, M. A. *See* **Ahmed, Shafique; et al., (80g:33018)**

Perelomov, A. M. *See* **Ahmed, Shafique; et al., (80g:33018)**

Russo, E. *See* **Crisci, M. R., (80i:65022)**

Yor, Marc Fonctions et processus de Bessel. (English summary) **(80k:60026)**

Zanovello, Renato Integrals of Anger, Weber and Airy-Hardy functions. (Italian) **(80j:33030)**

33A45 Spherical functions (Legendre polynomials and functions, spherical harmonics), ultraspherical polynomials

Askey, Richard Some absolutely monotonic functions. **80d:33006**

Belickiĭ, D. B. (*with* Kobrin, A. I.) Transformation of spherical functions in translation of a coordinate system. (Russian) **80i:33015**

Bustoz, Joaquin (*with* Savage, N.) Inequalities for ultraspherical and Laguerre polynomials. **80k:33009**

Connett, William C. (*with* Schwartz, A. L.) The harmonic machinery for eigenfunction expansions. **80k:33010**

Čuhrukidze, N. K. Asymptotic formulas for the generalized spherical Legendre function of the second kind. (Russian) **80i:33016**

Dubovik, O. A. (*with* Sidonskiĭ, O. B.) A group of matrices and Legendre functions. (Russian) **80k:33011**

Dunkl, Charles F. Orthogonal functions on some permutation groups. **80d:33007**

Fohl, O. S. Estimates of the derivatives of associated Legendre functions and related functions in the L_p metrics, $1<p<+\infty$, and in C. (Russian) **80m:33018**

Hadžiĭ, P. I. Sums with cylindrical functions that reduce to the probability function and to related functions. (Russian) **80h:33016**

Indu, B. D. *See* **Thapliyal, P. S.; et al., 80g:33013**

Jaroch, Otakar Orthoexponential polynomials and the Legendre polynomials. (Czech summary) **80f:33011**

Kobrin, A. I. *See* **Belickiĭ, D. B., 80i:33015**

Martins, Pedro de A. P. Determination of large-order spherical Coulomb functions with an argument lying between the origin and the common point of inflection. **80f:33012**

Sandberg, Vernon D. Tensor spherical harmonics on S^2 and S^3 as eigenvalue problems. **80a:33012**

Savage, N. *See* **Bustoz, Joaquin, 80k:33009**

Schwartz, A. L. *See* **Connett, William C., 80k:33010**

Šestopalov, V. P. *See* **Vinogradov, S. S.; et al., 80g:33014**

Sidonskiĭ, O. B. *See* **Dubovik, O. A., 80k:33011**

Thapliyal, P. S. (*with* Indu, B. D.; Tiwari, M. D.) Solution of Legendre's and Bessel's equations by Green's function approach. **80g:33013**

Tiwari, M. D. *See* **Thapliyal, P. S.; et al., 80g:33013**

Tučkin, Ju. A. *See* **Vinogradov, S. S.; et al., 80g:33014**

Vinogradov, S. S. (*with* Tučkin, Ju. A.; Šestopalov, V. P.) An effective solution to paired summator equations with the kernel in the form of adjoint Legendre functions. (Russian) **80g:33014**

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Jain, Sudha *See* **Prabhakar, T. R., (80m:33008)**

Kaĭlibaeva, G. K. *See* **Sultangazin, U. M., (80e:82028)**

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Oyanagi, Y. Calculation of Legendre moments from partial waves. **(80d:81106)**

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Smelov, V. V. Single-valued formation of conditions on interior and exterior boundaries of the domain in the odd P_{2N+1} approximation of the method of spherical harmonics. (Russian) **(80b:78010)**

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33A50 Gegenbauer functions

Dave, C. K. Another generalisation of Gegenbauer polynomial. **80j:33012**

Popov, Blagoj S. On a property of generalised Gegenbauer polynomials. (Macedonian summary) **80c:33008**

Sheballa, John V. A double angle sum formula for Gegenbauer polynomials. **80g:33015**

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33A55 Lamé, Mathieu, spheroidal wave functions

Secondary classifications:

Galicyn, A. S. Expansion, in an infinite domain, of functions in an integral in prolate spheroidal functions and some applications. (Russian) **(80h:35028)**

Grigor'eva, N. S. Asymptotic representations of modified wave functions of an oblate spheroid. (Russian) **(80i:34090)**

Hinton, F. L. Stokes multipliers for a class of ordinary differential equations. **(80m:34055)**

33A60 Other wave functions

Barancev, R. G. (*with* Èngel'gardt, V. N.) Asymptotic behavior of integrals of Airy functions with a power weight. (Russian) **80j:33013**

Èngel'gardt, V. N. *See* **Barancev, R. G., 80j:33013**

Maurone, Philip A. (*with* Phares, Alain J.) On the asymptotic behavior of the derivatives of Airy functions. **80j:33014**

Phares, Alain J. *See* **Maurone, Philip A., 80j:33014**

33A65 Orthogonal special functions and polynomials (Čebyšev, Hermite, Jacobi, Laguerre, etc.)

Abiodun, R. F. A. *See* **Sharma, Bhagirath Lal, 80k:33014**

Ahmed, Shafique Systems of nonlinear equations for the zeros of Hermite polynomials. **80g:33016**

Novel properties of the zeros of Laguerre polynomials. **80g:33017**

Relationship between equilibrium configurations of certain dynamical systems and zeros of Laguerre polynomials. (French summary) **80i:33017**

(*with* Bruschi, M.; Calogero, F.; Ol'šaneckiĭ, M. A.; Perelomov, A. M.) Properties of the zeros of the classical polynomials and of the Bessel functions. (Italian and Russian summaries) **80g:33018**

Allaway, Wm. R. Extensions of Sheffer polynomial sets. **80e:33008**

Al-Salam, Nadhla A. (*with* Al-Salam, Waleed A.) The centralizer of the Laguerre polynomial set. **80d:33008**

Al-Salam, Waleed A. *See* **Al-Salam, Nadhla A., 80d:33008**

Askey, Richard (*with* Ismail, Mourad E.-H.; Koornwinder, Tom H.) Weighted permutation problems and Laguerre polynomials. **80b:33004**

(*with* Wilson, James) A set of orthogonal polynomials that generalize the Racah coefficients or $6-j$ symbols. **80k:33012**

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Beohar, B. K. (*with* Sharma, Sushil) Approximation of a function by its Jacobi expansion. (Hindi. English summary) **80h:33017**

Bruschi, M. On the algebra of certain matrices related to the zeros of Hermite polynomials. **80f:33013**

(*with* Calogero, F.) Eigenvectors of a matrix related to the zeros of Hermite polynomials. **80f:33014**

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See also **Ahmed, Shafique; et al., 80g:33018**

Calogero, F. Asymptotic behaviour of the zeros of the generalized Laguerre polynomial $L_n^\alpha(x)$ as the index $\alpha\to\infty$ and limiting formula relating Laguerre polynomials of large index and large argument to Hermite polynomials. **80b:33005**

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(*with* Perelomov, A. M.) Asymptotic density of the zeros of Laguerre and Jacobi polynomials. **80f:33016**

See also **Bruschi, M., 80f:33014** *and* **Ahmed, Shafique; et al., 80g:33018**

Chandwani, G. N. Some operational formulas and generating functions for a general sequence of functions. **80m:33019**

Dehesa, Jesús S. The asymptotic behaviour of zeros of orthogonal polynomials. **80f:33017**

Flensted-Jensen, Mogens (*with* Koornwinder, Tom H.) Jacobi functions: the addition formula and the positivity of the dual convolution structure. **80j:33015**

Gianassuzi, Gennaro The asymptotic behaviour of the zeros of the Legendre s-polynomial of order 3. (Italian. English summary) **80g:33019**

Görlich, E. (*with* Markett, C.) Estimates for the norm of the Laguerre translation operator. **80h:33018**

Guerra, Sergio A determinant associated with a system of orthogonal polynomials. (Italian. English summary) **80j:33016**

Hussain, M. A. (*with* Srivastava, A. N.; Singh, S. N.) Bilinear generating functions for orthogonal polynomials related to ultraspherical polynomials. **80j:33017**

(*with* Singh, S. N.) Bilateral generating functions for orthogonal polynomials related to Hermite polynomials. **80j:33018**

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Ismail, Mourad E.-H. *See* **Askey, Richard; et al., 80b:33004**

Jain, Sunita *See* **Manocha, H. L., 80i:33020**

Karande, B. K. Formulas involving products of classical orthogonal polynomials by Fujiwara-Thakare approach. **80j:33019**

Khan, I. A. On a generating function for the product of two Jacobi polynomials. (Hindi. English summary) **80k:33019**

Koornwinder, Tom H. *See* **Askey, Richard; et al., 80b:33004** *and* **Flensted-Jensen, Mogens, 80j:33015**

Krall, Allan M. Orthogonal polynomials satisfying a fourth order differential equation. **80g:33020**

Laguerre polynomial expansions in indefinite inner product spaces. **80m:33020**

Manocha, H. L. (*with* Jain, Sunita) Some generating functions by means of Cauchy's integral formula. **80i:33020**

Markett, C. *See* **Görlich, E., 80h:33018**

Mathur, B. L. Results involving the product of Laguerre polynomials and the generalized function of n variables. (Hindi. English summary) **80h:33020**

Monk, D. S. (*with* Saff, Edward B.; Varga, Richard S.) On the zeros of Jacobi polynomials $P_n^{(\alpha,\beta)}(x)$. **80g:33021**

Ol'shanetskiĭ, M. A. *See* **Ahmed, Shafique; et al., 80g:33018**

Panda, Rekha *See* **Srivastava, Hari M., 80k:33018**

Pandey, R. N. *See* **Singh, Ramji, 80e:33009** *and* **Singh, Ramji, 80g:33024**

Patil, K. R. (*with* Thakare, Nimbakrishna) New operational formulas and generating functions for Laguerre polynomials. **80g:33022**

(*with* Thakare, Nimbakrishna) Operational formulas for a function defined by a generalized Rodrigues' formula. I. **80k:33013**

(*with* Thakare, Nimbakrishna) Multilinear generating function for the Konhauser biorthogonal polynomial sets. **80j:33020**

Perelomov, A. M. *See* **Calogero, F., 80f:33015**; **Calogero, F., 80f:33016** *and* **Ahmed, Shafique; et al., 80g:33018**

Prabhakar, T. R. (*with* Rekha, Suman) On the set of polynomials $G_n^{\lambda}(x)$. **80m:33021**

Pradhan, K. M. A generalized hypergeometric polynomial. (Hindi. English summary) **80j:33021**

Rahman, Mizan A positive kernel for Hahn-Eberlein polynomials. **80g:33023**

An elementary proof of Dunkl's addition theorem for Krawtchouk polynomials. **80j:33022**

Rai, P. N. (*with* Singh, S. N.) Representation of generalized Hermite polynomials. (Hindi. English summary) **80h:33021**

Rekha, Suman *See* **Prabhakar, T. R., 80m:33021**

Rouveaux, André Polynômes orthogonaux dont les polynômes dérivés sont quasi orthogonaux. (English summary) **80k:33021**

Saff, Edward B. *See* **Monk, D. S.; et al., 80g:33021**

Sharma, Bhagirath Lal (*with* Abiodun, R. F. A.) Some generating functions for Laguerre and related polynomials. **80k:33014**

Sharma, Sushil *See* **Beohar, B. K., 80h:33017**

Singh, Ramji (*with* Pandey, R. N.) A general differential equation for classical polynomials. **80e:33009**

(*with* Pandey, R. N.) Some special properties of classical polynomials. (Hindi. English summary) **80g:33024**

A note on integral representations for a set of polynomials suggested by Laguerre polynomials. (Hindi. English summary) **80k:33015**

Singh, S. D. *See* **Srivastava, A. N.; et al., 80e:33010**

Singh, S. N. (*with* Hussain, M. A.) Operational formulae for even and odd Bragg's polynomials. **80k:33016**

See also **Srivastava, A. N.; et al., 80e:33010**; **Rai, P. N., 80h:33021**; **Hussain, M. A.; et al., 80j:33017**; **Hussain, M. A., 80j:33018** *and* **Srivastava, A. N., 80k:33017**

Srinivasan, V. K. Laguerre polynomials. **80h:33022**

Srivastava, A. N. (*with* Singh, S. D.; Singh, S. N.) On a function defined by generalized Rodrigues' formula. **80e:33010**

(*with* Singh, S. N.) On the Konhauser polynomials $Y_n^{\alpha}(x;k)$. **80k:33017**

See also **Hussain, M. A.; et al., 80j:33017**

Srivastava, Hari M. An operational representation for the Laguerre polynomials. **80m:33022**

(*with* Panda, Rekha) A note on certain results involving a general class of polynomials. (Italian summary) **80k:33018**

Thakare, Nimbakrishna *See* **Patil, K. R., 80g:33022**; **Patil, K. R., 80j:33020** *and* **Patil, K. R., 80k:33013**

Varga, Richard S. *See* **Monk, D. S.; et al., 80g:33021**

Wilson, James *See* **Askey, Richard, 80k:33012**

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Al-Salam, Nadhla A. (*with* Al-Salam, Waleed A.) On a functional equation. **(80g:39006)**

Al-Salam, Waleed A. *See* **Al-Salam, Nadhla A., (80g:39006)**

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Anjaiah, B. (*with* Prabhakar, Alladi) Solution of a class of differential equations with variable coefficients by reversion method. **(80b:34005)**

Barrett, Wayne W. An alternative approach to Laguerre polynomial identities in combinatorics. **(80i:05009)**

Birtwistle, D. T. Generating functions for integrals involving harmonic oscillator functions. **(80e:81020)**

Bustoz, Joaquin (*with* Savage, N.) Inequalities for ultraspherical and Laguerre polynomials. **(80k:33009)**

Dooge, J. C. I. (*with* Garvey, B. J.) The use of Meixner functions in the identification of heavily-damped systems. **(80d:93029)**

Do Tan Si Representation of special functions by differintegral and hyperdifferential operators. **(80d:33002)**

Dunkl, Charles F. Orthogonal functions on some permutation groups. **(80d:33007)**

Èfros, V. D. "Linearization" of products of classical orthogonal polynomials. (Russian) **(80i:65016)**

Galicyn, A. S. *See* **Lukovs'kiĭ, Ĭ. O.; et al., (80d:35116)**

Garvey, B. J. *See* **Dooge, J. C. I., (80d:93029)**

Görlich, E. (*with* Markett, C.) Mean Cesàro summability and operator norms for Laguerre expansions. **(80k:42029)**

Grosswald, Emil ★Bessel polynomials. **(80i:33013)**

Ismail, Mourad E.-H. (*with* Tamhankar, M. V.) A combinatorial approach to some positivity problems. **(80i:05016)**

Jain, Sudha *See* **Prabhakar, T. R., (80i:33005)**

Kapur, J. N. Application of generalized hypergeometric functions to generalized birth and death processes. **(80i:60117)**

Lee, Doo Sung Triple series equations involving Jacobi polynomials. (Korean summary) **(80i:45013)**

Lomkaci, C. D. ★Нули присоединенной функции Лежандра $P_n^m(\cos\theta)$ относительо параметра n. (Russian) [Zeros of the associated Legendre function $P_n^m(\cos\theta)$ with respect to the parameter n] **(80a:65017)**

Lukovs'kiĭ, Ĭ. O. (*with* Žukovskiĭ, A. N.; Galicyn, A. S.) An expansion in eigenfunctions in an elliptic coordinate system and its applications. (Russian) **(80d:35116)**

Markett, C. *See* **Görlich, E., (80k:42029)**

Mehta, F. C. A general sampling expansion. **(80h:94003)**

Milne, Stephen C. A q-analog of restricted growth functions, Dobinski's equality, and Charlier polynomials. **(80e:05018)**

Pandey, J. N. (*with* Pathak, Ram Shankar) Eigenfunction expansion of generalized functions. **(80d:34029)**

Pandey, R. N. *See* **Singh, Ramji, (80i:33007)**

Pathak, Ram Shankar *See* **Pandey, J. N., (80d:34029)**

Prabhakar, Alladi *See* **Anjaiah, B., (80b:34005)**

Prabhakar, T. R. (*with* Jain, Sudha) Some bilateral generating functions for a general class of polynomials relevant to quantum mechanics. (Hindi. English summary) **(80i:33005)**

Rice, R. E. Iterative square roots of Čebyšev polynomials. **(80m:39005)**

Ringhofer, Klaus Koornwinder's polynomials and representations of the conformal group. **(80g:81028)**

Saha, Bibhuti Bhusan Group-theoretic study of certain generating functions of generalized Bessel polynomials. **(80i:33014)**

Sánchez-Dehesa, Jesus On a general system of orthogonal q-polynomials. **(80b:65023)**

Savage, N. *See* **Bustoz, Joaquin, (80k:33009)**

Singh, Ramji (*with* Pandey, R. N.) A general differential equation for classical polynomials. (Hindi. English summary) **(80k:33007)**

Singh, S. N. *See* **Srivastava, A. N., (80c:33010)**

Singh, Tikam A note on absolute summability of Laguerre series. (Hindi. English summary) **(80h:42013)**

Srivastava, A. N. (*with* Singh, S. N.) A note on generalized Laguerre polynomials. **(80c:33010)**

Srivastava, Hari M. (*with* Srivastava, Rekha) A certain class of dual equations involving series of Jacobi and Laguerre polynomials. **(80c:45009)**

Srivastava, Rekha *See* **Srivastava, Hari M., (80c:45009)**

Tamhankar, M. V. *See* **Ismail, Mourad E.-H., (80i:05016)**

Žukovskiĭ, A. N. *See* **Lukovs'kiĭ, Ĭ. O.; et al., (80d:35116)**

33A70 Other special functions

Aggarwala, Indira (*with* Goyal, A. N.) On formulae involving the product of $A^*\binom{x}{r}$ and Legendre functions. (Hindi. English summary) **80j:33023**

Bhargava, S. K. *See* **Singh Chandel, R. C., 80m:33023**

Calogero, F. Integral representation and generating functions for the polynomials $U_n^{(\alpha,\beta)}(x)$. **80k:33019**

Charalambides, Ch. A. Some properties and applications of the differences of the generalized factorials. **80j:33024**

Goyal, A. N. *See* **Aggarwala, Indira, 80j:33023**

Joshi, C. M. (*with* Singhal, J. P.) Operational formulas associated with a class of polynomials unifying the generalized Hermite and Laguerre polynomials. **80f:33018**

Kohno, Mitsuhiko An extended Airy function of the first kind. **80h:33023**

Maroni, P. Sur quelques relations intégrales entre les solutions de l'équation biconfluente de Heun. **80k:33020**

Pandey, R. N. *See* **Singh, Ramji, 80h:33024**

Philip, J. R. Note on the Kelvin phase functions. **80b:33006**

Prabhakar, T. R. (*with* Rekha, Suman) Some results on the polynomials $L_n^{\alpha,\beta}(x)$. **80f:33019**

Rekha, Suman *See* **Prabhakar, T. R., 80f:33019**

Ricci, Paolo Emilio Pseudo-hyperbolic and pseudo-trigonometric functions. (Italian. English summary) **80j:33025**

Sharma, Shobha Certain fractional q-integral operators. **80j:33026**

Sheffer, I. M. On polynomial sets of class S^k, and sets of rank k. **80j:33027**

Shrivastava, P. N. Classical polynomials—a unified presentation. **80j:33028**

Singh, Ramji (*with* Pandey, R. N.) Asymptotic behaviour of the generalized polynomial

(Hindi. English summary) **80h:33024**
Singh, S. D. *See* **Srivastava, A. N.; et al., 80j:33029**
Singh, S. N. *See* **Srivastava, A. N., 80c:33010; Srivastava, A. N., 80h:33025** *and* **Srivastava, A. N.; et al., 80j:33029**
Singhal, J. P. *See* **Joshi, C. M., 80f:33018**
Singh Chandel, R. C. (*with* Bhargava, S. K.) Some polynomials of R. Panda and the polynomials related to them. **80m:33023**
Srivastava, A. N. (*with* Singh, S. N.) A note on generalized Laguerre polynomials. **80c:33010**
(*with* Singh, S. N.) On a new generalized function. (Hindi. English summary) **80h:33025**
(*with* Singh, S. D.; Singh, S. N.) Operational derivation of generating functions of a generalized function. **80j:33029**
Srivastava, Rekha A note on certain results involving the polynomials $L_n^{(\alpha,\beta)}(x)$. (Italian summary) **80l:33022**
Zanovello, Renato Integrals of Anger, Weber and Airy-Hardy functions. (Italian) **80j:33030**

Secondary classifications:

Arscott, F. M. (*with* Lacroix, R.; Shymanski, W. T.) A three-term recursion and the computation of Mathieu functions. **80j:65013)**
Chakrabarty, M. *See* **Prabhakar, T. R., (80m:45011)**
Ėskin, L. D. Special functions of the theory of rotational diffusion. (Russian) **(80d:76089)**
Gould, Henry W. Estimation of actuarial functions arising in coal mine valuation. **(80h:90008)**
Gupta, Rameshwar D. (*with* Richards, Donald) Calculation of zonal polynomials of 3×3 positive definite symmetric matrices. **(80m:62047)**
Horadam, A. F. Chebyshev and Fermat polynomials for diagonal functions. **(80k:10009)**
Lacroix, R. *See* **Arscott, F. M.; et al., (80j:65013)**
Matveev, P. N. Quasipolynomial functions of a vector argument with integral operators. (Russian. English summary) **(80c:35018)**
Morris, Robert The dilogarithm function of a real argument. **(80e:65025)**
Prabhakar, T. R. (*with* Chakrabarty, M.) A class of basic integral equations with basic hypergeometric function ${}_1\Phi_1$ in the kernels. **(80m:45011)**
Richards, Donald *See* **Gupta, Rameshwar D., (80m:62047)**
Shymanski, W. T. *See* **Arscott, F. M.; et al., (80j:65013)**

33A75 Special functions and Lie groups [See also 22Exx, 43A80.]

Belousov, P. V. (*with* Sidonskiĭ, O. B.) Dual operators in lattices. (Russian) **80g:33025**
Hoggar, S. G. Equiangular lines. **80b:33007**
Sidonskiĭ, O. B. *See* **Belousov, P. V., 80g:33025**

Secondary classifications:

Akyeampong, D. A. Tensor harmonics in the helicity basis. **(80c:81005)**
Dieudonné, Jean Spherical functions and special functions. **(80m:43013)**
Ėfros, V. D. *See* **Mukhtarova, M. I., (80g:81033)**
Kalnins, E. G. (*with* Miller, Willard, Jr.) *R*-separation of variables for the four-dimensional flat space Laplace and Hamilton-Jacobi equations. **(80d:22017)**
Miller, Willard, Jr. *See* **Kalnins, E. G., (80d:22017)**
Mukhtarova, M. I. (*with* Ėfros, V. D.) Orthonormal basis of hyperspherical harmonics for three identical particles. (Russian. English summary) **(80g:81033)**
Wong, M. K. F. Multiplicity-free 6-*j* symbols and Weyl coefficients of U(*n*): explicit evaluation. **(80c:22018)**

33A99 Miscellaneous topics

Lenormand, Claude Polynômes classiques en variables non commutatives. **80k:33021**

34-XX ORDINARY DIFFERENTIAL EQUATIONS

34–01 Elementary exposition, textbooks

Birkhoff, Garrett (*with* Rota, Gian-Carlo) ★Ordinary differential equations. **80a:34001**
Braun, Martin ★Differentialgleichungen und ihre Anwendungen. **80h:34001**
Kiselev, A. I. *See* **Krasnov, M. L.; et al., 80c:34001**
Krasnov, M. L. (*with* Kiselev, A. I.; Makarenko, G. I.) ★Сборник задач по обыкновенным дифференциальным уравнениям. (Russian) [A collection of problems in ordinary differential equations] **80c:34001**
Makarenko, G. I. *See* **Krasnov, M. L.; et al., 80c:34001**
Rota, Gian-Carlo *See* **Birkhoff, Garrett, 80a:34001**
Tierney, John A. ★Differential equations. **80f:34001**
(Tremmel, Thomas) *See* **Braun, Martin, 80h:34001**

Secondary classifications:

Endl, Kurt (*with* Luh, Wolfgang) ★Analysis. I. **(80e:26001a)**
(*with* Luh, Wolfgang) ★Analysis. II. **(80e:26001b)**
(*with* Luh, Wolfgang) ★Analysis. III. **(80e:26001c)**
Flügge, Siegfried ★Mathematische Methoden der Physik. I. **(80m:00001)**
Kotkin, G. L. (*with* Serbo, V. G.) ★Сборник задач по классической механике. (Russian) [Collection of problems in classical mechanics] **(80f:70001)**
Luh, Wolfgang *See* **Endl, Kurt, (80e:26001a); Endl, Kurt, (80e:26001b)** *and* **Endl, Kurt, (80e:26001c)**
Pérez, Hernando Stability theory—stability following Ljapunov's second method. (Spanish) **(80g:34053)**
Powers, David L. ★Boundary value problems. **(80d:35001)**
Roberts, Charles E., Jr. ★Ordinary differential equations. **(80j:65001)**
Serbo, V. G. *See* **Kotkin, G. L., (80f:70001)**
Vidossich, Giovanni An invitation to the boundary value problems of ordinary differential equations. (Portuguese) **(80f:34022)**

34–02 Advanced exposition (research surveys, monographs, etc.)

Arnol'd, V. I. ★Дополнительные главы теории обыкновенных дифференциальных уравнений. (Russian) [Supplementary chapters to the theory of ordinary differential equations] **80f:34001**
Giacaglia, Giorgio E. O. ★Методы теории возмущений для нелинейных систем. (Russian) [Perturbation methods in nonlinear systems] **80h:34002**
Magnus, Wilhelm (*with* Winkler, Stanley) ★Hill's equation. **80k:34001**
(Markeev, A. P.) *See* **Giacaglia, Giorgio E. O., 80h:34002**
Neuman, František Global properties of the *n*th order linear differential equations. **80d:34001**
Schwabik, Štefan (*with* Tvrdý, Milan; Vejvoda, Otto) ★Differential and integral equations. **80h:34003**
(Sokol'skiĭ, A. G.) *See* **Giacaglia, Giorgio E. O., 80h:34002**
Tvrdý, Milan *See* **Schwabik, Štefan; et al., 80h:34003**
Vejvoda, Otto *See* **Schwabik, Štefan; et al., 80h:34003**
Winkler, Stanley *See* **Magnus, Wilhelm, 80k:34001**

Secondary classifications:

Conley, Charles ★Isolated invariant sets and the Morse index. **(80c:58009)**
Mawhin, Jean ★Topological degree methods in nonlinear boundary value problems. **(80c:47055)**
Ovsjannikov, L. V. ★Групповой анализ дифференциальных уравнений. (Russian) [Group analysis of differential equations] **(80d:58072)**
Proskurjakov, A. P. ★Метод Пуанкаре в теории нелинейных колебаний. (Russian) [Poincaré's method in the theory of nonlinear oscillations] **(80d:34044)**

34–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Bainov, D. D. *See* **Stojanov, N. V., (80b:01026)**
Gorr, G. V. (*with* Kudrjašova, L. V.; Stepanova, L. A.) ★Классические задачи динамики твердого тела. Развитие и современное состояние. (Russian) [Classical problems in the theory of solid bodies. Their development and current state] **(80m:70001)**
Kudrjašova, L. V. *See* **Gorr, G. V.; et al., (80m:70001)**
(Mitropol'skiĭ, Ju. O.) *See* **Stojanov, N. V.; et al., (80b:01026)**
Stepanova, L. A. *See* **Gorr, G. V.; et al., (80m:70001)**
Stojanov, N. V. (*with* Bainov, D. D.) Academician Jurii Alekseevič Mitropol'skiĭ (on the occasion of his 60th birthday). (Bulgarian) **(80b:01026)**
Biography:
Mitropol'skiĭ, Ju. O. *See* **Stojanov, N. V.; et al., (80b:01026)**
Birthday:
Mitropol'skiĭ, Ju. O. *See* **Stojanov, N. V.; et al., (80b:01026)**

34–04 Explicit machine computation and programs (not the theory of computation or programming)

34–06 Proceedings, conferences, etc.

(Berkovič, L. M.) *See* **Proceedings: Seminar on Differential Equations, 80k:34002**
(Fábera, Jiří) *See* **Equadiff, 80c:34002**
(Gérard, Raymond) *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, 80f:34003**
(Ramis, Jean-Pierre) *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, 80f:34003**
(Šarkovs'kiĭ, O. M.) *See* **Asymptotic behavior of solutions of functional-differential equations, 80j:34001**
(Strygin, V. V.) *See* **Proceedings: Seminar on Differential Equations, 80k:34002**
Asymptotic behavior of solutions of functional-differential equations ★Асимптотическое поведение решений дифференциально-функциональных уравнений. (Russian) [Asymptotic behavior of solutions of functional-differential equations] **80j:34001**
Complex fields *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, 80f:34003**
Conference:
Czechoslovak, Differential Equations and their Applications *See* **Equadiff, 80c:34002**
Differential equations *See* **Equadiff, 80c:34002; Equations différentielles et systèmes de Pfaff dans le champ complexe, 80f:34003** *and* **Proceedings: Seminar on Differential Equations, 80k:34002**
Differential equations in the complex domain ★Differential equations in the complex domain. (Japanese) **80f:34002**
Equadiff ★Equadiff IV. **80c:34002**
Equations différentielles et systèmes de Pfaff dans le champ complexe ★Équations différentielles et systèmes de Pfaff dans le champ complexe. **80f:34003**
Functional differential equations *See* **Qualitative research on stability of solutions of functional differential equations, 80g:34001** *and* **Asymptotic behavior of solutions of functional-differential equations, 80j:34001**
Kyoto *See* **Differential equations in the complex domain, 80f:34002** *and* **Qualitative research on stability of solutions of functional differential equations, 80g:34001**
Pfaff systems *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, 80f:34003**
Prague *See* **Equadiff, 80c:34002**

Proceedings:
Seminar on Differential Equations ★Труды семинара по дифференциальным уравнениям. Вып. 3. (Russian) [Proceedings of a Seminar on Differential Equations. No. 3] **80k:34002**
Qualitative research on stability of solutions of functional differential equations ★Qualitative research on stability of solutions of functional differential equations. (Japanese title). (Japanese) **80g:34001**
Séminaire:
Equations Différentielles et Systèmes de Pfaff dans le Champ Complexe *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, 80f:34003**
Seminar:
Differential Equations *See* **Proceedings: Seminar on Differential Equations, 80k:34002**
Strasbourg *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, 80f:34003**
Symposium:
Differential Equations in the Complex Domain *See* **Differential equations in the complex domain, 80f:34002**
Qualitative Research on Stability of Solutions of Functional Differential Equations *See* **Qualitative research on stability of solutions of functional differential equations, 80g:34001**

Secondary classifications:

(Dzjadik, V. K.) *See* **Theory of functions and its applications, (80k:30001)**
(Maksudov, F. G.) *See* **Functional analysis and its applications, (80d:00009)**
(Mitropol'skiĭ, Ju. O.) *See* **Theory of functions and its applications, (80k:30001)**
(Zabreiko, P. P.) *See* **Qualitative and approximate methods for the investigation of operator equations, (80j:47002)**
Astérisque *See* **Journées Singulières, (80e:58001)**
Dijon *See* **Journées Singulières, (80e:58001)**
Functional analysis and its applications ★Функциональный анализ и его применение. Вып. 3. (Russian) [Functional analysis and its applications. No. 3] **(80d:00009)**
Journées Singulières ★Journées Singulières de Dijon. **(80e:58001)**
Operator equations *See* **Qualitative and approximate methods for the investigation of operator equations, (80j:47002)**
Qualitative and approximate methods for the investigation of operator equations ★Качественные и приближенные методы исследования операторных уравнений. Вып. 3. (Russian) [Qualitative and approximate methods for the investigation of operator equations. No. 3] **(80j:47002)**
Singularities *See* **Journées Singulières, (80e:58001)**
Theory of functions and its applications ★Теории функций и ее приложения. (Russian) [The theory of functions and its applications] **(80k:30001)**

34Axx General theory

Secondary classifications:

Kestin, J. *See* **Khalifa, H. E.; et al., (80k:80004)**
Khalifa, H. E. (*with* Kestin, J.; Wakeham, W. A.) The theory of the transient hot-wire cell for measuring the thermal conductivity of gaseous mixtures. **(80k:80004)**
Protić, Ljubomir Some new numerical methods for finding approximate solutions of differential equations obtained by linear interpolation. (Serbo-Croatian. English summary) **(80e:65075)**
Wakeham, W. A. *See* **Khalifa, H. E.; et al., (80k:80004)**

34A05 Solutions in closed form, integration by quadratures, reduction of differential equations

Bubeska, Elena S. On a Riccati differential equation. (Macedonian. French summary) **80k:34003**
Čirikalov, V. A. *See* **Kalaida, O. F., 80j:34002**
Dokovski, P. D. (*with* Prevalska, K. G.) On a case of solution of Abel's equation in quadratures. (Bulgarian. Russian and English summaries) **80k:34004**
(*with* Prevalska, K. G.) An Abel differential equation that is solvable in quadratures. (Bulgarian. Russian and English summaries) **80k:34005**
(*with* Prevalska, K. G.) A nonlinear second-order differential equation. (Bulgarian. Russian and English summaries) **80k:34006**
Grudo, E. I. A method for lowering the order of linear differential equations. (Russian) **80f:34004**
Iskra, K. K. An integration method for normal systems of differential equations. (Russian) **80c:34003**
Kalaida, O. F. (*with* Čirikalov, V. A.) Solution of a differential problem with discontinuous coefficients by the splitting method. (Russian. English summary) **80j:34002**
Kečkić, Jovan D. (*with* Kocić, V. Lj.) Second order nonlinear differential equations equivalent to linear differential equations. **80i:34002**
Kocić, V. Lj. *See* **Kečkić, Jovan D., 80i:34002**
Piperevski, Boro M. On a class of homogeneous linear third-order differential equations. (Macedonian. French summary) **80k:34007**
Prevalska, K. G. *See* **Dokovski, P. D., 80k:34004; Dokovski, P. D., 80k:34005** *and* **Dokovski, P. D., 80k:34006**
Rosen, Gerald Alternative integration procedure for scale-invariant ordinary differential equations. **80d:34002**
Roy, S. K. On the differential equation $dy/dx=(a_1x+b_1y+c_1)/(a_2x+b_2y+c_2)$. **80g:34002**

Secondary classifications:

Beklemiševa, L. A. Classification of polynomial systems with respect to birational transformations. I. (Russian) **(80g:34033a)**
Classification of polynomial systems with respect to birational transformations. II. (Russian) **(80g:34033b)**
De Corte, L. *See* **Mertens, R., (80a:70008)**
Dikiĭ, L. A. *See* **Gel'fand, I. M., (80i:58027)**
Gel'fand, I. M. (*with* Dikiĭ, L. A.) Integrable nonlinear equations and the Liouville theorem. (Russian) **(80i:58027)**
Kečkić, Jovan D. On some classes of linear equations. **(80a:39010)**
Mertens, R. (*with* De Corte, L.) An exact mathematical solution of the problem of tops rising by friction. **(80a:70008)**

34A08 Equations not solved with respect to the highest-order derivative, singular solutions

34A10 Initial value problems: general existence and uniqueness theorems; continuous dependence of solutions on parameters, initial conditions and boundary conditions [See also 45D05.]

Antosiewicz, H. A. Fixed point theorems and ordinary differential equations. **80d:34003**
Bondi, Antonino (*with* Rao, Giuseppe) A generalization of the theorem of Carathéodory on the Cauchy problem for the equation $y'=f(x,y)$. (Italian. English summary) **80g:34003**
Čandrov, G. I. A generalization of the Gronwall inequality and its application. (Russian) **80a:34002**
Coletti, Giulianella (*with* Regoli, Giuliana) Criteria for the existence and limitation of solutions of nonlinear differential equations. (Italian. English summary) **80e:34001**
Jones, Robert A. Existence theorems for the matrix Riccati equation $W'+WP(t)W+Q(t)=0$. **80k:34008**
Kac, Ja. D. *See* **Kalitin, B. S., 80d:34004**
Kalas, Josef Nonuniqueness for the solutions of ordinary differential equations. **80c:34004**
Kalitin, B. S. (*with* Kac, Ja. D.) Special properties of derivatives with respect to initial data. (Russian) **80d:34004**
Kvinikadze, G. G. Some remarks on the solutions of Kneser's problem. (Russian) **80b:34001**
Novruzov, G. M. Investigation of systems of semiexplicit differential equations with Volterra operators. (Russian) **80m:34001**
Pavel, N. (*with* Turinici, Mihai) Positive solutions of a system of ordinary differential equations. **80k:34009**
Pfaff, Rainer Gewöhnliche lineare Differentialgleichungen zweiter Ordnung mit Distributionskoeffizient. **80k:34010**
Ramm, A. G. Existence in the large of solutions to simultaneous differential equations. (Russian summary) **80c:34005**
Rao, Giuseppe *See* **Bondi, Antonino, 80g:34003**
Regoli, Giuliana *See* **Coletti, Giulianella, 80e:34001**
Turinici, Mihai *See* **Pavel, N., 80k:34009**
Wiener, Klaus Lösungen von Anfangswertproblemen bei Differentialgleichungen von nichtganzzahliger Ordnung. **80d:34005**
Zernov, A. E. Solutions of a system of singular differential equations that are partially solved with respect to the derivatives. (Russian) **80d:34006**

Secondary classifications:

Čehlov, V. I. On the solvability of a nonlinear integro-differential system with an unknown boundary. (Russian) **(80a:45018)**
Dawidowski, Marian On some generalization of Bogoliubov averaging theorem. **(80m:34043)**
Dmitriev, M. G. *See* **Glizer, V. Ja., (80k:34073)**
Dobrušin, R. L. Vlasov equations. (Russian) **(80e:82002)**
Glizer, V. Ja. (*with* Dmitriev, M. G.) Singular perturbations and generalized functions. (Russian) **(80k:34073)**
Haahti, Heikki (*with* Korhonen, Eero) Sur les équations différentielles non-complètement intégrables. (English summary) **(80h:58004)**
Hasanov, A. A. The asymptotics of a solution to a two-parameter, singularly perturbed problem in a critical case. (Russian) **(80k:34074)**
Korhonen, Eero *See* **Haahti, Heikki, (80h:58004)**
Nohel, John A. A nonlinear singularly perturbed Volterra functional differential equation. **(80i:45020)**
Pachpatte, B. G. On some fundamental integrodifferential inequalitites for differential equations. **(80e:34007)**
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Sentis, Rémi Équations différentielles à second membre mesurable. (English summary) **(80d:34014)**
Suhinin, M. F. The differentiability of the solution of an ordinary differential equation with respect to the initial condition. (Russian) **(80b:34083)**

34A15 Initial value problems: continuation of solutions

Derkačev, A. A. (*with* Sadykov, H. M.) A modified integral of convolution type, convenient for numerical realization, that expresses the solution of a linear differential equation. (Russian. Tajiki summary) **80m:34002**
Pavel, Garofiţa On the approximate solution of the Cauchy problem for a linear differential equation of order n. (Romanian. English summary) **80i:34003**
Sadykov, H. M. *See* **Derkačev, A. A., 80m:34002**

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34A20 Differential equations in the complex domain [See also 30D05.]

Boĭko, S. S. (*with* Petrenko, V. P.) Asymptotic properties of the solutions of linear differential equations with entire coefficients. (Russian) **80d:34007**

Cegel'nik, V. V. *See* **Gromak, V. I., 80b:34003**

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Gromak, V. I. (*with* Cegel'nik, V. V.) Rational solutions of Painlevé's fifth equation. (Russian. English summary) **80b:34003**

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Konopljannik, I. A. A system of third-order equations without movable critical points. (Russian. English summary) **80m:34005**

Kostjukovič, M. E. On the question of the compatibility of an equation of Fuchs class with certain Painlevé equations. (Russian) **80j:34005**

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34A25 Analytical theory: series, transformations, transforms, operational calculus, etc. [See also 44–XX, 47E05.]

Anjaiah, B. (*with* Prabhakar, Alladi) Solution of a class of differential equations with variable coefficients by reversion method. **80b:34005**

Braaksma, B. L. J. Laplace integrals, factorial series and singular differential equations. **80j:34008**

Chudnovsky, David V. Systèmes de Schlesinger simplifiés et algèbres d'opérateurs différentiels qui commutent. (English summary) **80i:34008**

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Kelly, Brian J. Admissible domains for higher order differential equations. **80h:34005**

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Ling, Rina Multiple scale perturbation for second-order nonlinear differential equations. (French and German summaries) **80f:34006**

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34A30 Linear equations and systems

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Fal'ko, N. S. Some topological properties of inhomogeneous linear systems. (Russian) **80i:34011**

Gur'janov, A. E. Representation of the integral matrix of a linear homogeneous stationary system. (Russian. English summary) **80f:34008**

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Segur, Harvey *See* **Ablowitz, Mark J.**; **et al.**, **(80a:58001)**

34A34 Nonlinear equations and systems, general

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34A35 Differential equations of infinite order

Balašova, G. S. Nontriviality of a class of functions and solvability of nonlinear differential equations of infinite order. (Russian) **80i:34016**

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Sandler, R. L. Solutions of infinite order homogeneous differential equations. (Russian. Lithuanian and English summaries) **80a:34010**

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Podporin, V. P. On the question of the representation of linear operators in the form of infinite order differential operators with generalized differentiation. (Russian) **(80a:47042)**

34A40 Differential inequalities

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Indu, B. D. *See* **Thapliyal, P. S.**; **et al.**, **(80g:33013)**

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Tiwari, M. D. *See* **Thapliyal, P. S.**; **et al.**, **(80g:33013)**

34A45 Theoretical approximation of solutions

Bellman, Richard E. On the solution of approximate equations. **80f:34010**

Cupenko, N. E. A general method for solving a second-order homogeneous linear equation. (Russian) **80k:34015**

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Podoĭjan, S. V. Additive structure of a perturbed fundamental matrix. (Russian. English summary) **80l:34020**

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Jansen, M. J. W. *See* **Grasman, J.; et al., (80m:34053)**

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Zahar-Itkin, M. H. A vector double sweep method and simplex geometry. (Russian) **(80a:65161)**

34A50 Numerical approximation of solutions {For numerical analysis, see 65Lxx.}

Borisjuk, M. N. *See* **Čerepennikov, V. B., 80l:34021**

Čerepennikov, V. B. (*with* Borisjuk, M. N.) Construction of majorant estimates for systems of linear differential equations in the space of small time. (Russian) **80l:34021**

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Štykan, A. B. A generalization of the geometric representation of differential equations and methods of solution based on it. (Russian) **80j:34016**

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Kuzhmedov, R. H. *See* **Seidov, Z. F., (80j:85007)**

Martins, Pedro de A. P. Determination of large-order spherical Coulomb functions with an argument lying between the origin and the common point of inflection. **(80f:33012)**

Matano, Hiroshi *See* **Yamaguti, Masaya, (80d:58043)**

Minčeva, M. I. Approximate solution of a problem of nonlinear oscillations by the method of "near" operators. (Bulgarian. Russian and French summaries) **(80j:34032)**

Seidov, Z. F. (*with* Kuzahmedov, R. H.) New solutions of the Lane-Emden equation. **(80j:85007)**

Shimauchi, Hiroyuki On an approximation of Bessel function by the tau method. **(80h:33015)**

Yamaguti, Masaya (*with* Matano, Hiroshi) Euler's finite difference scheme and chaos. **(80d:58043)**

Yoder, Charles F. Diagrammatic theory of transition of pendulum like systems. **(80b:70036)**

Zahar, R. V. M. Recurrence techniques for a differential eigenvalue problem. **(80h:34031)**

34A55 Inverse problems

Secondary classifications:

Levitan, B. M. Sufficient conditions for the solvability of the inverse problem of scattering theory on the entire line. (Russian) **(80d:34027)**

34A60 Equations with multivalued right-hand sides [See also 49A50, 49E10.]

Aubin, Jean-Pierre Monotone evolution of resource allocations. **80h:34011**

Janiak, T. (*with* Łuczak-Kumorek, E.; Kisielewicz, M.) Existence theorem for functional-differential relations. **80h:34012**

Kisielewicz, M. *See* **Janiak, T.; et al., 80h:34012**

Łuczak-Kumorek, E. *See* **Janiak, T.; et al., 80h:34012**

Marchi, Maria Vittoria Invariant sets. (Italian. English summary) **80g:34011**

Muhsinov, M. A. Invariant sets of differential inclusions. (Russian. Tajiki summary) **80b:34013**

Plotnikov, V. A. Averaging method for differential inclusions and its application to optimal control problems. (Russian) **80h:34014**

Averaging of differential inclusions. (Russian) **80j:34017**

Redheffer, Raymond Matrix equations in the Siegel disk. **80g:34012**

Schatzman, Michelle A class of nonlinear differential equations of second order in time. **80a:34013**

Seeds, Rémi Équations différentielles à second membre mesurable. (English summary) **80d:34014**

Tolstonogov, A. A. Differential inclusions in Banach spaces and continuous selectors. (Russian) **80b:34011**

Vrkoč, Ivo A new definition and some modifications of Filippov cone. **80k:34017**

Secondary classifications:

Bainov, D. D. *See* **Dočev, D. Tr., (80a:34089)**

Castaing, Charles Équation différentielle multivoque avec contrainte sur l'état dans les espaces de Banach. **(80c:34067)**

Solutions continues à droite d'une équation différentielle multivoque avec contrainte sur l'état. (English summary) **(80d:34091)**

Chukwu, Ethelbert Nwakuche Functional inclusion and controllability of nonlinear neutral functional differential systems. **(80k:34091)**

Dočev, D. Tr. (*with* Bainov, D. D.) Existence of solutions of a class of multivalued differential equations with deviating argument. (Russian) **(80a:34089)**

Matahashi, Tomomi (*with* Tsutsumi, Masayoshi) Periodic solutions of semilinear pseudoparabolic equations in Hilbert space. **(80j:34085)**

Pucci, Patrizia The problem of determining all solutions of an orientor field. (Italian) **(80g:49021)**

Raczyński, S. On nonconvex control in a separable Banach space. (Russian summary) **(80m:49031)**

Tolstonogov, A. A. Properties of solutions of differential inclusions in a Banach space. (Russian) **(80m:34065)**

Tsutsumi, Masayoshi *See* **Matahashi, Tomomi, (80j:34085)**

Zecca, Pietro (*with* Zezza, Pierluigi) Nonlinear boundary value problems in Banach spaces for multivalue differential equations on a noncompact interval. **(80k:34084)**

Zezza, Pierluigi *See* **Zecca, Pietro, (80k:34084)**

34A99 None of the above, but in this section

Al-Abedeen, Ahmed Z. (*with* Arora, H. L.) A global existence and uniqueness theorem for ordinary differential equations of generalized order. **80f:34012**

Arora, H. L. *See* **Al-Abedeen, Ahmed Z., 80f:34012**

Kwong, Man Kam A second-order Dirichlet differential expression that is not bounded below. **80f:34013**

Norkin, S. K. The asymptotic estimate of 0-solutions of a multidimensional system. (Russian) **80b:34012**

Oja, Erkki *S*-orthogonal projection operators as asymptotic solutions of a class of matrix differential equations. **80d:34015**

Winkler, Regine Ein Existenzbeweis für gewöhnliche Differentialgleichungen mit Methoden der Nonstandard-Analysis. **80c:34006**

Secondary classifications:

Aris, Rutherford ★Mathematical modelling techniques. **(80b:00008)**

Bailey, Paul B. A slightly modified Prüfer transformation useful for calculating Sturm-Liouville eigenvalues. **(80a:65182)**

Kaplan, James L. (*with* Yorke, James A.) Nonassociative, real algebras and quadratic differential equations. **(80d:58060)**

Kufudaki, Olga Boundary value problems in analysis of nonuniform finite multilayer structures. **(80a:94045)**

Netzer, Norbert Differentialgleichungen im Zusammenhang mit der Pilgerschrittransformation. **(80m:22010)**

Noguchi, Akira (*with* Watanabe, Hideaki; Sakai, Kiyoshi) Solitons of the nonlinear self-dual network with saturable property. **(80a:35106)**

Pacchiarotti, N. The concept of solution and boundary theorems in abstract spaces in the absence of uniqueness. (Italian) **(80a:47100)**

Sakai, Kiyoshi *See* **Noguchi, Akira; et al., (80a:35106)**

Sarlet, Willy On the transition between second-order and first-order systems within the context of the inverse problem of Newtonian mechanics. **(80l:70023)**

Watanabe, Hideaki *See* **Noguchi, Akira; et al., (80a:35106)**

Yorke, James A. *See* **Kaplan, James L., (80d:58060)**

34Bxx Boundary value problems

Agarwal, Ravi P. ★Boundary value problems for higher order differential equations. **80k:34018**

Vidossich, Giovanni An invitation to the boundary value problems of ordinary differential equations. (Portuguese) **80l:34022**

Secondary classifications:

Lee, Sang J. Perturbations of operators, with application to ordinary differential operators. **(80c:47011)**
Schwabik, Štefan (*with* Tvrdý, Milan; Vejvoda, Otto) ★Differential and integral equations. **(80h:34003)**
Tvrdý, Milan *See* **Schwabik, Štefan; et al., (80h:34003)**
Vejvoda, Otto *See* **Schwabik, Štefan; et al., (80h:34003)**

34B05 Linear equations

Arolska, M. At. (*with* Baĭnov, D. D.) A two-point boundary value problem for a singularly perturbed linear system of differential equations. (Russian) **80g:34013**
Baĭnov, D. D. *See* **Arolska, M. At., 80g:34013**
Beyn, Wolf-Jürgen Schwach majorisierende Elemente und die besonderen Monotonie-Eigenschaften von Randwertaufgaben zweiter Ordnung. (English summary) **80h:34015**
Cheng, S. S. (*with* Edelson, Allan L.) Fourth-order nonselfadjoint differential equations with clamped-free boundary conditions. **80h:34016**
Čurikov, V. A. Unique solvability of a linear two-point boundary value problem for a system of third-order ordinary differential equations. (Russian) **80d:34016**
Edelson, Allan L. *See* **Cheng, S. S., 80h:34016**
Hošek, Josef Eine Bemerkung zum Zusammenhang des Randwertproblems mit begleitender Gleichung. (Czech and Russian summaries) **80k:34019**
Kostjučenko, A. G. (*with* Škalikov, A. A.) Summability of expansions in eigenfunctions of differential operators and of convolution operators. (Russian) **80d:34017**
Matkovskiĭ, A. P. The solvability of a boundary value problem for equations with bounded operator coefficients. (Russian) **80k:34020**
Murty, K. N. (*with* Rao, D. R. K. S.) On transformation of boundary value problems. **80k:34023**
Panfilov, N. G. *See* **Rožkov, V. I., 80a:34014**
Podoljan, S. V. An algorithm for the construction of a solution to a linear periodic boundary value problem. (Russian) **80b:34013**
Rajput, Kamal S. On minimal potentials for the Schrödinger equation with fixed eigenvalue for the associated Legendre equation. (Hindi. English summary) **80m:34011**
Rao, D. R. K. S. *See* **Murty, K. N., 80k:34023**
Regińska, Teresa Approximation of eigenvalues of nonselfadjoint problems on an infinite interval. (Polish) **80k:34021**
Roberts, S. M. Direct use of the fundamental matrix in two-point boundary value problems. **80h:34017**
Rožkov, V. I. (*with* Panfilov, N. G.) A boundary value problem for a linear system with a small parameter multiplying the derivative. (Russian) **80a:34014**
Schultze, Bernd On the definition of Stone-regularity. **80c:34013**
Schwabik, Štefan (*with* Tvrdý, Milan) Boundary value problems for generalized linear differential equations. (Russian summary) **80i:34024**
Škalikov, A. A. *See* **Kostjučenko, A. G., 80d:34017**
Tonkov, E. L. Second-order linear equation with periodic coefficients. (Russian) **80d:34018**
Tvrdý, Milan *See* **Schwabik, Štefan, 80i:34024**
Usmani, Riaz A. A uniqueness theorem for a boundary value problem. **80j:34018**
Velikiĭ, A. P. Asymptotic approach to the transfer of boundary conditions for systems of linear ordinary differential equations. (Russian) **80d:34019**
Wang, Xian *See* **Ye, Yan Qian, 80f:34014**
White, R. E. Weak solutions of $(p(x)u'(x))' + g(x)u'(x) + qu(x) = f$ with $q, f \in H_{-1}[a, b]$, $0 < p(x) \in L_\infty[a, b]$, $g(x) \in L_\infty[a, b]$ and $u \in H_1[a, b]$. **80k:34022**
Ye, Yan Qian (*with* Wang, Xian) Nonlinear differential equations arising in the theory of electron beam focusing. (Chinese) **80f:34014**

Secondary classifications:

Amos, R. J. (*with* Everitt, W. N.) On integral inequalities and compact embeddings associated with ordinary differential expressions. **(80f:47039)**
Edelson, Allan L. Positive solutions of the equation $(m(t)x'(t))' + A(t)x(t) = 0$. **(80f:34032)**
Elias, Uri Focal points for a linear differential equation whose coefficients are of constant signs. **(80h:34041)**
Èl'ner, Ì. A difference method for degenerate ordinary differential equations. (Russian) **(80i:65091)**
Everitt, W. N. *See* **Amos, R. J., (80f:47039)**
Kreith, Kurt Removable singularities for generalized Prüfer transformations. **(80g:34035)**
Küpper, Tassilo Einschliessungsaussagen für Differentialoperatoren vierter Ordnung und ein Verfahren zur Berechnung von Schrankenfunktionen. (English summary) **(80g:65093)**
Offei, D. N. Eigenvalue and eigenmatrix problems for a second order differential equation. **(80m:34020)**

34B10 Multipoint boundary value problems

Agarwal, Ravi P. (*with* Krishnamoorthy, P. R.) Existence and uniqueness of solutions of boundary value problems for third order nonlinear differential equations. **80k:34024**
Hartman, Philip Monotony properties and inequalities for Green's functions for multipoint boundary value problems. **80a:34015**
Klokova, J. *See* **Vasil'ev, N. I., 80f:34015**
Krishnamoorthy, P. R. Three-point nonlinear boundary value problem. **80k:34023**
See also **Agarwal, Ravi P., 80k:34024**
O'Malley, R. E., Jr. A singular singularly-perturbed linear boundary value problem. **80k:34025**
Pokoryĭ, Ju. V. Sturm properties of the spectrum of a class of boundary value problems. (Russian) **80m:34012**
Schwabik, Štefan (*with* Tvrdý, Milan) On linear problems in the space BV. **80m:34013**
Šeda, V. A partially ordered space connected with the de la Vallée Poussin problem. **80g:34014**
Tvrdý, Milan *See* **Schwabik, Štefan, 80m:34013**
Vasil'ev, N. I. (*with* Klokovs, J.) ★Основы теории краевых задач обыкновенных дифференциальных уравнений. (Russian) [Foundations of the theory of boundary value problems in ordinary differential equations] **80f:34015**

Secondary classifications:

Bergander, H. Eine verallgemeinerte Darstellung inelastischer Deformationsgesetze zur Erleichterung der numerischen Lösung von Anfangs-Randwertproblemen. (Russian and English summaries) **(80d:73010)**
Kasue, Y. *See* **Ojika, Takeo, (80k:65069)**
Ojika, Takeo (*with* Kasue, Y.) Initial-value adjusting method for the solution of nonlinear multipoint boundary-value problems. **(80k:65069)**

34B15 Nonlinear boundary value problems

Agarwal, Ravi P. (*with* Krishnamoorthy, P. R.) Boundary value problems for nth order ordinary differential equations. **80g:34015**
Baĭnov, D. D. (*with* Miluševa, Svetla D.) Application of the averaging method for the solution of boundary problems for ordinary differential and integro-differential equations. **80d:34020**
(*with* Konstantinov, M. M.; Miluševa, Svetla D.) Structural stability and regular approximations of the solutions of certain boundary value problems with slow and fast variables. **80h:34018**
Čistjakov, V. M. Convergence of an iteration process for ordinary differential equations with unbounded nonlinearities. (Russian) **80m:34014**
Čverčko, Michal Über eine Randwertaufgabe vierter Ordnung in vier Punkten. (Slovak and Russian summaries) **80e:34008**
A remark on a paper: "Some existence theorems for nth-order boundary value problems" (J. Differential Equations **18** (1975), 158–169) by W. G. Kelley. **80a:34016**
Ėĭdel'man, Ju. S. A boundary value problem for a differential equation with a parameter. (Russian) **80k:34026**
Garner, J. B. *See* **Moorti, V. R. G., 80h:34020**
Gudkovs, V. Solvability of a general boundary value problem as a consequence of the solvability of an elementary two-point boundary value problem. (Russian) **80f:34016**
Properties of the solutions of a second-order differential equation. (Russian) **80g:34016**
Hamedani, G. G. On the existence of periodic boundary conditions for certain nonlinear vector differential equations. (Czech and Russian summaries) **80h:34019**
Howes, Frederick A. Singularly perturbed superquadratic boundary value problems. **80f:34017**
Junghanns, Peter (*with* Meyer, Sybille) Eine asymptotische Zerlegung der Lösung einer schwach nichtlinearen Randwertaufgabe vierter Ordnung mit einem kleinen Parameter bei der höchsten Ableitung. **80j:34019**
(Kelley, Walter G.) *See* **Čverčko, Michal, 80a:34016**
Kiguradze, I. T. (*with* Rahunkova, I.) Solvability of a nonlinear problem of Kneser's type. (Russian) **80m:34015**
Knobloch, H. W. Boundary value problems for systems of nonlinear differential equations. **80f:34018**
Konstantinov, M. M. *See* **Baĭnov, D. D.; et al., 80h:34018**
Krishnamoorthy, P. R. *See* **Agarwal, Ravi P., 80g:34015**
Lepins, L. Axiomatic approach to lower and upper functions for boundary value problems. (Russian) **80c:34014a**
A method for assigning lower and upper functions. (Russian) **80c:34014b**
Ling, Rina Parameters and solutions of linear and nonlinear oscillators. **80g:34017**
Mehri, B. Forced nonlinear oscillation for certain third order differential equations. **80c:34015**
Meyer, Sybille *See* **Junghanns, Peter, 80j:34019**
Miluševa, Svetla D. *See* **Baĭnov, D. D., 80d:34020** *and* **Baĭnov, D. D.; et al., 80h:34018**
Moorti, V. R. G. (*with* Garner, J. B.) Existence and uniqueness theorems for three-point boundary value problems for third-order differential equations. **80h:34020**
de Mottoni, Piero Bifurcation for a class of elementary Neumann problems. **80f:34025**
Nistri, Paolo Positive solutions of a nonlinear eigenvalue problem with discontinuous nonlinearity. **80m:34016**
Ponomarev, V. D. The existence of the solution of the simplest boundary value problem for a second-order differential equation. (Russian) **80g:34018**
Pruszko, Tadeusz Operational equations in space B_0^q and boundary value problems. **80f:34026**
Rahunkova, I. *See* **Kiguradze, I. T., 80m:34015**
Sanchez, Luis A note on a differentiable equation of the dynamics of wires. (French summary) **80i:34027**
Troy, William C. Nonmonotonic solutions of the Falkner-Skan boundary layer equation. **80j:34020**
Vidossich, Giovanni Existence and uniqueness theorems for boundary value problems by means of the theory of eigenvalues. (Portuguese) **80j:34021**
White, R. E. Weak solution of $(r, (x, u(x))\, u'(x))' = (Fu)'(x)$ with $r(0, u(0))u'(0) = ku(0)$, $r(L, u(L))u'(L) = hu(L)$ and k, h are suitable elements of $[0, \infty]$. **80h:34021**
Zwahlen, Bruno A minimax principle for the critical value of a boundary value problem with positive and increasing nonlinearity. (German summary) **80k:34027**

Secondary classifications:

Baĭnov, D. D. *See* **Mitropol'skiĭ, Ju. O.; et al., (80j:34048)**
Conjura, E. (*with* Petryshyn, Walter V.) Extension of nonlinear densely defined operators, rates of convergence for the error and the residual, and application to differential equations. **(80c:47056)**
Fitzpatrick, P. M. Existence results for equations involving noncompact perturbations of Fredholm mappings with applications to differential equations. **(80b:47084)**

Fonarev, A. A. The solution of nonlinear equations with monotone transformations. (Russian) **(80i:47088)**

Gupta, Chaitan P. Periodic solutions for coupled first-order systems of ordinary differential equations. **(80i:34059)**

van Harten, A. Singular perturbations for nonlinear second-order ODE with nonlinear b.c. of Neumann or mixed type. **(80f:34050)**

Howes, Frederick A. An asymptotic theory for a class of nonlinear Robin problems. **(80a:34080)**

Singularly perturbed nonlinear Robin problems. **(80g:34055)**

Klokovs, J. *See* **Vasil'ev, N. I., (80f:34015)**

Kvinikadze, G. G. Some remarks on the solutions of Kneser's problem. (Russian) **(80b:34001)**

Leggett, Richard W. (*with* Williams, Lynn R.) Multiple positive fixed points of nonlinear operators on ordered Banach spaces. **(80i:47073)**

Mawhin, Jean Boundary value problems at resonance for vector second-order nonlinear ordinary differential equations. **(80h:47070)**

Miluševa, Svetla D. *See* **Mitropol's'kiĭ, Ju. O.; et al., (80j:34048)**

Mitropol's'kiĭ, Ju. O. (*with* Baĭnov, D. D.; Miluševa, Svetla D.) Application of the averaging method to the solution of boundary value problems for ordinary differential and integro-differential equations. (Russian) **(80j:34048)**

Mock, M. S. The half-line boundary value problem for $u_{xxx} = f(u)$. **(80k:35059)**

Petryshyn, Walter V. *See* **Conjura, E., (80c:47056)**

Reinhardt, H.-J. Stability and convergence for singular perturbations and boundary layer problems. **(80a:34081)**

Šeda, V. A partially ordered space connected with the de la Vallée Poussin problem. **(80g:34014)**

Vasil'ev, N. I. (*with* Klokovs, J.) ★Основы теории краевых задач обыкновенных дифференциальных уравнений. (Russian) [Foundations of the theory of boundary value problems in ordinary differential equations] **(80f:34015)**

White, R. E. Weak solutions of $(p(x)u'(x))' + g(x)u'(x) + qu(x) = f$ with $q, f \in H_{-1}[a, b]$, $0 < p(x) \in L_\infty[a, b]$, $g(x) \in L_\infty[a, b]$ and $u \in H_1[a, b]$. **(80k:34022)**

Williams, Lynn R. *See* **Leggett, Richard W., (80i:47073)**

Zecca, Pietro (*with* Zezza, Pierluigi) Nonlinear boundary value problems in Banach spaces for multivalue differential equations on a noncompact interval. **(80h:34084)**

Zezza, Pierluigi *See* **Zecca, Pietro, (80h:34084)**

34B20 Weyl theory and its generalizations

Amos, R. J. On a Dirichlet and limit-circle criterion for second-order ordinary differential expressions. **80b:34014**

Bhagat, Bikan On the L^2 classification of a second-order matrix differential equation. **80g:34019**

Browne, Patrick J. The interlacing of eigenvalues for periodic multi-parameter problems. **80b:34015**

Eastham, M. S. P. The limit-$2n$ case of symmetric differential operators of order $2n$. **80g:34020**

Everitt, W. N. (*with* Halvorsen, S. G.) On the asymptotic form of the Titchmarsh-Weyl m-coefficient. **80f:34019**

Graef, John R. Limit circle type criteria for nonlinear differential equations. **80b:34016**

Halvorsen, S. G. *See* **Everitt, W. N., 80f:34019**

Knowles, Ian On the number of L^2-solutions of second order linear differential equations. **80a:34017**

Kwong, Man Kam Two counterexamples in the theory of limit point classification of second-order differential expressions. **80h:34022**

Moodie, James Weyl's m-coefficient in a B^*-algebra. **80h:34023**

Neuman, František Limit circle classification and boundedness of solutions. **80h:34024**

Secondary classifications:

Čerednik, I. V. Differential equations for Baker-Ahiezer functions of algebraic curves. (Russian) **(80g:35108)**

Gilbert, Richard C. A class of symmetric ordinary differential operators whose deficiency numbers differ by an integer. **(80f:47042)**

Hinton, Don B. Eigenfunction expansions and spectral matrices of singular differential operators. **(80d:47073)**

Deficiency indices of odd-order differential operators. **(80d:34024)**

Zahar-Itkin, M. H. Dissipativity conditions and a matrix Weyl limit point. (Russian) **(80i:34013)**

34B25 Spectral theory, Sturm-Liouville, and scattering theory; eigenfunctions, eigenvalues, and expansions [See also 42–XX, 43–XX, 45C05, 47Axx, 47Bxx, 47E05.]

Abdullaeva, G. A. Calculation of the regularized trace for a Sturm-Liouville operator. (Russian. Azerbaijani and English summaries) **80k:34028**

Alberverio, Sergio (*with* Fenstad, Jens Erik; Høegh-Krohn, Raphael) Singular perturbations and nonstandard analysis. **80k:34029**

Amos, R. J. (*with* Everitt, W. N.) On integral inequalities associated with ordinary regular differential expressions. **80b:34017**

Andreev, V. A. The connection between "pseudopotentials" and the method of the inverse scattering problem. (Russian. English summary) **80a:34018**

Atkinson, F. V. (*with* Everitt, W. N.) Bounds for the point spectrum for a Sturm-Liouville equation. **80g:34021**

Barcilon, Victor (*with* Turchetti, G.) On an inverse eigenvalue problem with truncated spectral data. **80e:34009**

Begovatov, E. A. Spectral properties of a Sturm-Liouville operator problem in a noncylindrical domain. (Russian) **80e:34010**

Ben-Artzi, Matania Eigenfunction expansions for a class of differential operators. **80h:34025**

Benedek, Agnes I. (*with* Panzone, Rafael) Bessel expansions arising from anomalous Sturm-Liouville differential systems. **80c:34016**

Benzinger, Harold E. Eigenvalues of regular differential operators. **80a:34019**

Browne, Patrick J. (*with* Sleeman, B. D.) Nonlinear multiparameter Sturm-Liouville problems. **80m:34017**

(*with* Sleeman, B. D.) Regular multiparameter eigenvalue problems with several parameters in the boundary conditions. **80m:34018**

Bruschi, M. (*with* Levi, D.; Ragnisco, O.) Evolution equations associated to the triangular-matrix Schrödinger problem solvable by the inverse spectral transform. (Italian and Russian summaries) **80a:34020**

Burnap, C. (*with* Greenberg, William; Zweifel, P. F.) Eigenvalue problem for singular potentials. (Italian summary) **80j:34022**

Butler, John B., Jr. On the inverse problem for selfadjoint operators defined on certain rigged Hilbert spaces. **80i:34028**

Chakravarty, N. K. (*with* Sen Gupta, Prabir Kumar) On the distribution of the eigenvalues of a matrix differential operator. **80g:34022**

Chudnovsky, David V. Description de systèmes tridimensionnels complètement intégrables en termes de systèmes d'opérateurs unidimensionnels associés à l'équation opératorielle de Dirac. (English summary) **80k:34030**

Delft, P. (*with* Trubowitz, E.) Inverse scattering on the line. **80e:34011**

Denisov, A. M. (*with* Semenko, E. V.; Haleeva, I. V.) The incorrectness of the inverse scattering problem. (Russian) **80a:34021**

Djudjaeva, G. V. Expansion in eigenfunctions of a differential operator in the complex domain. (Russian) **80f:34020**

Dym, Harry (*with* Kravitsky, Naftali) On recovering the mass distribution of a string from its spectral function. **80i:34029**

(*with* Kravitsky, Naftali) On the inverse spectral problem for the string equation. **80c:34017**

Erovenko, V. A. The continuous spectrum of a perturbed differential operator. (Russian. English summary) **80d:34021**

Etgen, G. J. (*with* Tefteller, S. C.) A two-parameter boundary problem for second-order differential system. **80j:34023**

Everitt, W. N. (*with* Zettl, A.) Products of differential expressions without smoothness assumptions. **80c:34018**

See also **Amos, R. J., 80b:34017** *and* **Atkinson, F. V., 80g:34021**

Faierman, M. Eigenfunction expansions associated with a two-parameter system of differential equations. **80j:34024**

Distribution of eigenvalues of a two-parameter system of differential equations. **80b:34018**

Feigin, V. I. Estimates of the length of gaps in the spectrum of a first-order system. (Russian) **80k:34031**

Fenstad, Jens Erik *See* **Alberverio, Sergio; et al., 80k:34029**

Gogobija, V. Š. The upper and lower bounds of the spectrum of a modified quasipotential eigenvalue problem. (Russian. Georgian and English summaries) **80k:34032**

Gordon, A. Ja. The continuous spectrum of a one-dimensional Schrödinger operator. (Russian) **80h:34026**

Greenberg, William *See* **Burnap, C.; et al., 80j:34022**

Güichal, Edgardo N. ★Sobre un problema de Sturm-Liouville con condiciones de contorno irregulares. (Spanish) [A Sturm-Liouville problem with irregular boundary conditions] **80b:34019**

Gundersen, Gary G. Lower bounds for eigenvalues of selfadjoint problems. **80i:34030**

Guseĭnov, G. Š. *See* **Levitan, B. M., 80b:34022**

Guseĭnov, I. M. A formula of Levinson type for a system of Dirac equations. (Russian. Azerbaijani and English summaries) **80d:34022**

Guseĭnov, V. G. *See* **Maksudov, F. G., 80b:34023**

Hačatrjan, I. G. Transformation operators for high order differential equations. (Russian. Armenian and English summaries) **80e:34012**

Hadid, S. B. Estimates of Liouville-Green type for solutions of systems of differential equations. **80g:34023**

Hald, Ole H. The inverse Sturm-Liouville problem with symmetric potentials. **80a:34022**

Haleeva, I. V. *See* **Denisov, A. M.; et al., 80a:34021**

Halilova, R. Z. *See* **Kerimov, Ja. R., 80k:34034**

Hamedani, G. G. Periodic boundary value problem for a system of nonlinear second order equations. **80c:34019**

Harrell, Evans M. The band-structure of a one-dimensional, periodic system in a scaling limit. **80i:34031**

Hartman, Philip Uniqueness of principal values, complete monotonicity of logarithmic derivatives of principal solutions, and oscillation theorems. **80i:34032**

Some singular nonoscillatory boundary value problems. **80k:34033**

Hinton, Don B. Deficiency indices of odd-order differential operators. **80d:34024**

An expansion theorem for an eigenvalue problem with eigenvalue parameter in the boundary condition. **80d:34023**

Høegh-Krohn, Raphael *See* **Alberverio, Sergio; et al., 80k:34029**

Horgan, C. O. (*with* Nemat-Nasser, S.) Bounds on eigenvalues of Sturm-Liouville problems with discontinuous coefficients. (French summary) **80b:34020**

Il'in, V. A. (*with* Joó, István) A uniform estimate of eigenfunctions and an upper estimate of the number of eigenvalues of the Sturm-Liouville operator. (Russian) **80f:34021**

(*with* Joó, István) Uniform estimation of eigenfunctions and an upper bound on the number of eigenvalues of the Sturm-Liouville operator with a potential from the class L^p. (Russian) **80i:34033**

(*with* Joó, István) Estimation of the difference of partial sums of expansions corresponding to two arbitrary nonnegative selfadjoint extensions of two operators of Sturm-Liouville type, for an absolutely continuous function. (Russian) **80m:34019**

de Jager, Eduard M. (*with* Küpper, Tassilo) The Schrödinger equation as a singular perturbation problem. **80j:34025**

Jakupov, V. M. On the scattering theory for a system of differential equations with a smooth, compactly supported potential. (Russian) **80d:34025**

Joó, István *See* **Il'in, V. A., 80f:34021; Il'in, V. A., 80i:34033** *and* **Il'in, V. A., 80m:34019**

Jusin, B. V. A proof of the variational correspondence between the coefficients of the asymptotic expansion of the resolvent of the Sturm-Liouville equation. (Russian) **80a:34023**

Kac, İ. S. Some general theorems on the density of the spectrum of a string. (Russian) **80f:34022**

Kalisch, Gerhard K. On singular self-adjoint Sturm-Liouville operators. **80b:34021**

Kauffman, Robert M. The number of Dirichlet solutions to a class of linear ordinary differential equations. **80f:34023**

Kerimov, Ja. R. (*with* Halilova, R. Z.) Calculation of the regularized trace of a boundary value problem. (Russian. Azerbaijani and English summaries) **80k:34034**

Knowles, Ian On the location of eigenvalues of second-order linear differential operators. **80d:34026**

Kravitsky, Naftali *See* **Dym, Harry, 80c:34017** *and* **Dym, Harry, 80i:34029**

Küpper, Tassilo *See* **de Jager, Edward M., 80j:34025**

Levi, D. *See* **Bruschi, M.; et al., 80a:34020**

Levitan, B. M. (*with* Guseĭnov, G. Š.) The calculation of the principal term of the asymptotics of the length of the lacuna of the periodic Sturm-Liouville problem. (Russian) **80b:34022**

Sufficient conditions for the solvability of the inverse problem of scattering theory on the entire line. (Russian) **80d:34027**

Lundina, D. Š. Exact dependence between asymptotic formulas for the eigenvalues of the Sturm-Liouville operator and the smoothness of the potential. (Russian) **80a:34024**

Luning, C. D. (*with* Perry, W. L.) Positive solutions of superlinear eigenvalue problems via a monotone iterative technique. **80k:34035**

Maksudov, F. G. (*with* Guseĭnov, V. G.) Asymptotic behavior of the number of eigenvalues of the Sturm-Liouville equation with an operator coefficient on the half-axis. (Russian. Azerbaijani and English summaries) **80b:34023**

McLeod, J. B. (*with* Stuart, Charles A.) Nonlinear Sturm-Liouville problems with no secondary bifurcation. **80g:34024**

Miles, John W. On the second Painlevé transcendent. **80b:34024**

Minkler, H. (*with* Niemeyer, H.) Erweitert-reguläre Randwertprobleme. **80f:34024**

Mirzov, D. D. A Sturm-Liouville boundary value problem for a nonlinear system. (Russian) **80k:34036**

Misjura, T. V. Characterization of the spectra of the periodic and antiperiodic boundary value problems that are generated by the Dirac operator. (Russian) **80a:34025**

Characteristics of the spectra of the periodic and antiperiodic boundary value problems that are generated by the Dirac operator. II. (Russian) **80l:34034**

Moses, Harry E. An example of the effect of rescaling of the reflection coefficient on the scattering potential for the one-dimensional Schrödinger equation. **80b:34025**

Mustafaev, B. A. The transformation operator for the Sturm-Liouville equation with increasing potential and the Riemann function. I. (Russian. Azerbaijani and English summaries) **80d:34028**

Nemat-Nasser, S. *See* **Horgan, C. O., 80b:34020**

Niemeyer, H. *See* **Minkler, H., 80f:34024**

Offei, D. N. Eigenvalue and eigenmatrix problems for a second order differential equation. **80m:34020**

Otelbaev, M. A criterion for nuclearity of the resolvent of a Sturm-Liouville operator. (Russian) **80k:34037**

Pandey, J. N. (*with* Pathak, Ram Shankar) Eigenfunction expansion of generalized functions. **80d:34029**

Panzone, Rafael *See* **Benedek, Agnes L., 80c:34016**

Parasjuk, İ. O. One-dimensional Schrödinger equation with an almost periodic potential. (Russian. English summary) **80a:34026**

Palaeva, É. É. The spectrum of a fourth-order nonselfadjoint differential operator on the half-axis. (Russian) **80e:34013**

Pathak, Ram Shankar *See* **Pandey, J. N., 80d:34029**

Perry, W. L. *See* **Luning, C. D., 80k:34035**

Pham The Lai (*with* Robert, Didier) Valeurs propres d'une classe d'équations différentielles singulières sur une demi-droite. **80j:34026**

Plaksina, O. A. Characterization of the spectra of quasiperiodic problems for a Sturm-Liouville operator. (Russian) **80l:34035**

Postawa, S. On zero points of the linear combinations of the eigenfunctions in a singular Sturm-Liouville problem. **80h:34027**

Ragusco, O. *See* **Bruschi, M.; et al., 80a:34020**

Rédei, L. B. Bound for the harmonic oscillator Green's function. **80c:34020**

Reglińska, Teresa Approximation of eigenvalues for a class of differential problems on an infinite interval. (Polish) **80h:34028**

Robert, Didier *See* **Pham The Lai, 80j:34026**

Runakovskiĭ, E. M. Operator treatment of a boundary value problem with a spectral parameter that occurs rationally in the boundary conditions. (Russian) **80d:34030**

Sabatier, Pierre C. On extremal solutions of Sturm-Liouville inverse problems. **80e:34014**

Saryev, M. A. A selfadjoint boundary value problem for a two-parameter Hamiltonian equation. (Russian. Turkmen summary) **80m:34021**

Schmincke, U.-W. On Schrödinger's factorization method for Sturm-Liouville operators. **80f:34025**

Schultze, Bernd Strongly irregular boundary value problems. **80h:34029**

Green's matrix and the formula of Titchmarsh-Kodaira for singular left-definite canonical eigenvalue problems. **80g:34025**

Semenko, E. V. *See* **Denisov, A. M.; et al., 80a:34021**

Sen Gupta, Prabir Kumar *See* **Chakravarty, N. K., 80g:34022**

Siroid, İ. P. A nonselfadjoint analogue of nonreflecting potentials. (Russian) **80m:34022**

Sleeman, B. D. *See* **Browne, Patrick J., 80m:34017** *and* **Browne, Patrick J., 80m:34018**

Stakun, A. A. Questions of expansibility in eigenfunctions of a second-order differential operator. (Russian) **80b:34026**

Stuart, Charles A. *See* **McLeod, J. B., 80g:34024**

Symes, William W. An integral representation for eigenfunctions of linear ordinary differential operators. **80h:34030**

Tarapova, E. I. A Sturm-Liouville boundary value problem with nonlinear boundary conditions. I. (Russian) **80l:34036**

Tefteller, S. C. *See* **Etgen, G. J., 80j:34023**

Tiwari, S. On the theory of transforms associated with eigenvectors. III. **80l:34037**

On eigenvectors of a matrix differential operator. **80b:34027**

Trifunović, Milomir Asymptotic behaviour of the spectral function of the integro-differential operator $L = B^{-1}A$. **80l:34038**

Trubowitz, E. *See* **Deift, P., 80e:34011**

Turchetti, G. *See* **Barcilon, Victor, 80e:34009**

Wierzbowski, Mirosław A. On the spectral properties of the operator $Lu = q_0(x)u^{(m)} + \cdots + q_{m-1}\,x(u) + q_m(x)$ with periodic q_n in the Besicovitsch space $B^2(\mathbf{R})$. (Russian summary) **80c:34021**

Wood, Alastair D. On the deficiency indices of a fourth order singular differential operator. **80m:34023**

Zahar, R. V. M. Recurrence techniques for a differential eigenvalue problem. **80h:34031**

Zettl, A. *See* **Everitt, W. N., 80c:34018**

Zirilli, Francesco Spectral properties of some one-dimensional "singular" Schrödinger Hamiltonian. II. (Italian summary) **80d:34031**

Zweifel, P. F. *See* **Burnap, C.; et al., 80j:34022**

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Amir, Dan (*with* Ziegler, Zvi) Expansions of generalized completely convex functions. **(80f:26009)**

Apyšev, O. D. (*with* Otelbaev, M.) The spectrum of a class of differential operators and some imbedding theorems. (Russian) **(80l:47065)**

Arustamjan, A. M. (*with* Vergasov, V. L.; Čuhovskiĭ, F. N.) A study of the solutions of the one-dimensional Schrödinger equation with a potential of Hardy type. *S*-matrix formalism. (Russian. English summary) **(80f:81098)**

Barkovskiĭ, Ju. S. (*with* Judovič, V. I.) Taylor vortex generation in the case of counter-rotating cylinders and the spectral properties of a class of boundary value problems. (Russian) **(80k:76074)**

Barnes, Earl R. Dual variational inequalities for extremal eigenvalue problems. **(80c:49030)**

Ben-Artzi, Matania Spectral properties of linear ordinary differential operators with slowly decreasing coefficients. **(80l:47066)**

Bollé, D. Higher-order Levinson's theorems and the high-temperature expansion of the partition function. **(80k:81142)**

Bruk, V. M. Linear relations in a space of vector-valued functions. (Russian) **(80j:47038)**

Carlson, Robert Genericity of simple eigenvalues. **(80k:47020)**

Expansions associated with nonselfadjoint boundary value problems. **(80e:47040)**

Chebli, Houcine Théorème de Paley-Wiener associé à un opérateur différentiel singulier sur $(0, \infty)$. **(80g:47050)**

Cheng, S. S. (*with* Edelson, Allan L.) Fourth-order nonselfadjoint differential equations with clamped-free boundary conditions. **(80h:34016)**

Collatz, Lothar Verzweigungsdiagramme und Hypergraphen. **(80d:58016)**

Connett, William C. (*with* Schwartz, A. L.) The harmonic machinery for eigenfunction expansions. **(80k:33010)**

Coudray, Christiane *See* **Sergent, Pierre, (80c:81099)**

Čuhovskiĭ, F. N. *See* **Arustamjan, A. M.; et al., (80f:81098)**

Davies, E. Brian (*with* Simon, Barry) Scattering theory for systems with different spatial asymptotics on the left and right. **(80c:81110)**

Denkel, N. *See* **Fishel, B., (80f:47041)**

Dorfman, I. Ja. Formal calculus of variations in the algebra of smooth cylindrical functions. (Russian) **(80a:35110)**

Edelson, Allan L. *See* **Cheng, S. S., (80h:34016)**

Firsova, N. E. Some spectral identities for a one-dimensional Hill operator. (Russian. English summary) **(80b:81111)**

Fishel, B. (*with* Denkel, N.) Reducibility of differential operators—some examples. **(80f:47041)**

Fröman, Nanny (*with* Fröman, Per Olof) On the theory of vibration-rotation interaction. **(80d:34077)**

Fröman, Per Olof *See* **Fröman, Nanny, (80d:34077)**

Fry, M. P. Another instructive example in eigenvalue perturbation theory. **(80f:81032)**

Gaborak, Ja. N. (*with* Kušnirčuk, İ. F.; Ponjuk, M. I.) Equivalence of third order differential operators with a regular singular point. (Russian) **(80a:47074)**

Gilbert, Richard C. Asymptotic formulas for solutions of a singular linear ordinary differential equation. **(80j:34068)**

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Graffi, Sandro (*with* Grecchi, Vincenzo; Levoni, S.; Maioli, M.) Resonances in one-dimensional Stark effect and continued fractions. **(80h:81010)**

Grecchi, Vincenzo Zeros of Bessel functions by means of the Trefftz-Fichera orthogonal invariants method through the Schrödinger equation. (Italian summary) **(80f:33010)**

See also **Graffi, Sandro; et al., (80h:81010)**

van Haeringen, H. On an inhomogeneous Schrödinger equation and its solutions in scattering theory. **(80e:81083a)**

The Coulomb and Coulomb-like off-shell Jost functions. **(80e:81083b)**

Hristov, E. H. Expansions in squares of the solutions of the radial Schrödinger equation. (Russian. English summary) **(80c:81017)**

Judovič, V. I. *See* **Barkovskiĭ, Ju. S., (80k:76074)**

Kaper, Hans G. A constructive approach to the solution of a class of boundary value problems of mixed type. **(80d:82046c)**

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Spectral representation of an unbounded linear transformation arising in the kinetic theory of gases. **(80d:82046b)**

Kasymov, E. A. (*with* Otelbaev, M.) Essential selfadjointness of a differential operator. (Russian. Kazakh summary) **(80k:47052)**

Keener, M. S. (*with* Travis, C. C.) Positive cones and focal points for a class of nth-order differential equations. **(80l:34050)**

Kolmanenko, V. D. Scattering theory with different state spaces of perturbed and free system. **(80f:47006)**

Kuniřčuk, Ĭ. F. *See* **Gaborak, Ja. N.; et al., (80a:47074)**
Kuznecov, Ju. A. (*with* Sorokin, S. B.) The method of two-sided approximations in eigenvalue problems. (Russian) **(80m:65062)**
Lapwood, E. R. (*with* Sato, Ryosuke) The pattern of eigenfrequencies of overtones of torsional oscillations of a layered spherical shell. **(80a:86001)**
Lee, Sung J. Operators generated by countably many differential operators. **(80a:47075)**
Levoni, S. *See* **Graffi, Sandro; et al., (80b:81010)**
Maioli, M. *See* **Graffi, Sandro; et al., (80b:81010)**
Malherbe, J. B. *See* **Scheffler, T. B., (80d:81016)**
Marchesin, Dan The scaling limit of the φ^2 field in the anharmonic oscillator. **(80k:81115)**
Moodie, James A boundary-value problem for an ordinary differential equation whose coefficients are in a B^*-algebra. **(80d:34083)**
Natanzon, G. A. General properties of potentials for which the Schrödinger equation is solvable by means of hypergeometric functions. (Russian. English summary) **(80g:81014)**
Nelson, H. D. (*with* Glasgow, D. A.) Eigenrelations for general second-order systems. **(80e:70026)**
Otelbaev, M. *See* **Apyšev, O. D., (80i:47065)** *and* **Kasymov, E. A., (80k:47052)**
Pilcher, Everett Counting focal points and characteristic roots. **(80g:58020)**
Poujak, M. I. *See* **Gaborak, Ja. N.; et al., (80a:47074)**
Portinari, João C. An inverse scattering transform for potentials of compact support. **(80b:81095)**
Radmore, P. M. The Schrödinger equation with an anharmonic oscillator potential. **(80m:81021)**
Roach, G. F. (*with* Sleeman, B. D.) On the spectral theory of operator bundles. II. **(80h:47024)**
Russakovskiĭ, R. M. Operator treatment of a boundary value problem with a spectral parameter that occurs rationally in the boundary conditions. II. (Russian) **(80k:47054)**
Ryndina, V. V. The equivalence of an nth-order differential operator having a regular singular point, and an Euler operator in the space $A(G)$. (Russian) **(80j:47048)**
Šahin, M. M. A boundary value problem in a class of discontinuous functions and the calculus of variations. (Russian) **(80g:49024)**
Sato, Ryosuke *See* **Lapwood, E. R., (80a:86001)**
Scheffler, T. B. (*with* Malherbe, J. B.) Complex energy eigenvalues of a zero-range atom in a uniform electric field. **(80d:81016)**
Schwartz, A. L. *See* **Connett, William C., (80k:33010)**
Sergent, Pierre (*with* Coudray, Christiane) The inverse problem at fixed energy for finite range complex potentials. **(80c:81099)**
Simon, Barry New rigorous existence theorems for phase transitions in model systems. **(80a:82022)**
See also **Davies, E. Brian, (80c:81110)**
Sleeman, B. D. *See* **Roach, G. F., (80h:47024)**
Sorokin, S. B. *See* **Kuznecov, Ju. A., (80m:65062)**
Theodorakopoulos, Nikos On the statistical mechanics of a discrete φ^4 chain. **(80e:82041)**
Travis, C. C. *See* **Keener, M. S., (80i:34050)**
Vergasov, V. L. *See* **Arustamjan, A. M.; et al., (80f:81098)**
Ziegler, Zvi *See* **Amir, Dan, (80f:26009)**

34B27 Green functions

Bellman, Richard E. On the solution of the multidimensional inhomogeneous differential equation. **80k:34038**
Dijksma, Aalt The generalized Green's function for regular ordinary differential subspaces in $L^2[a, b] \oplus L^2[a, b]$. **80c:34022**
Kulik, V. L. On the question of the dependence on the parameter of the Green function for the problem of the invariant torus. (Russian) **80a:34027**
Kuznecova, L. M. On the question of the existence of the Green matrix for a periodic boundary value problem for a system of higher-order linear differential equations. (Russian) **80g:34026**
Lee, John W. The sign-regularity properties of Green's functions for a special class of mixed boundary-value problems. **80h:34032**
Šehter, B. L. On the question of estimates for the Green function of a two-point boundary value problem. (Russian) **80j:34027**
Zabov, V. M. The closedness of the generalized Green matrices of linear differential operators. (Russian) **80c:34023**

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Delbourgo, R. The gauge technique. (Italian summary) **(80e:81055)**
Kabak, G. I. Generalized Green matrix for a multivalued operator. (Russian) **(80g:47054)**

34B30 Special equations (Mathieu, Hill, Bessel, etc.) [See also 33–XX.]

Adams, E. *See* **Ames, W. F., 80g:34027**
Ames, W. F. (*with* Adams, E.) Nonlinear boundary and eigenvalue problems for the Emden-Fowler equations by group methods. (French and German summaries) **80g:34027**
Goldberg, Wallace (*with* Hochstadt, Harry) On a Hill's equation with two gaps in its spectrum. **80h:34033**
Hayashi, Kiyoshi The asymptotic behavior of the boundary layer equation. **80c:34024**
Hochstadt, Harry A direct and inverse problem for a Hill's equation with double eigenvalues. **80f:34026**
See also **Goldberg, Wallace, 80h:34033**
Osawa, Takeo *See* **Sawada, Katuro, 80f:34027**
Qin, Yuan Xun Periodic solutions of Riccati's equation with periodic coefficients. (Chinese. English summary) **80m:34024**
Sawada, Katuro (*with* Osawa, Takeo) On exactly soluble nonlinear ordinary differential equations of the Liénard type. **80f:34027**

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Choodnovsky, Gregory V. *See* **Chudnovsky, David V., (80g:70007)**
Chudnovsky, David V. (*with* Choodnovsky, Gregory V.) Completely integrable class of mechanical systems connected with Korteweg-de Vries and multicomponent Schrödinger equations. **(80g:70007)**
Grigor'eva, N. S. Asymptotic representations of modified wave functions of an oblate spheroid. (Russian) **(80i:34090)**
Kac, Mark Nonlinear dynamics and inverse problems. **(80e:82037)**
Maroni, P. Sur quelques relations intégrales entre les solutions de l'équation biconfluente de Heun. **(80k:33020)**
McKean, H. P. (*with* Trubowitz, E.) Hill's surfaces and their theta functions. **(80b:30039)**
Mooney, J. W. Monotone methods for the Thomas-Fermi equation. **(80b:80011)**
Trubowitz, E. *See* **McKean, H. P., (80b:30039)**

34B99 None of the above, but in this section

Monastyrnyĭ, P. I. On the theory of the method of invariant imbedding for boundary value problems. (Russian. English summary) **80a:34028**

Secondary classifications:

Shaw, J. K. (*with* Winfrey, W. R.) Positivity properties of linear differential operators. **(80b:34008)**
Winfrey, W. R. *See* **Shaw, J. K., (80b:34008)**

34Cxx Qualitative theory

Secondary classifications:

Broništeĭn, I. U. ★Extensions of minimal transformation groups. **(80j:54034)**
Kir'jan, S. V. (*with* Mamytov, Dž.) Problems of synthesis and analytic design of optimal regulators for oscillatory systems with bounded excitations. (Russian) **(80f:93037)**
Mamytov, Dž. *See* **Kir'jan, S. V., (80f:93037)**
Šil'man, S. V. ★Метод производящих функций в теории динамических систем. (Russian) [The generating function method in the theory of dynamical systems] **(80f:93052)**
Spyrou, N. Relativistic effects in many-body systems of finite size, internal structure, and internal motions. I. "Self-acceleration" of astrophysical systems. **(80h:70011)**

34C05 Location of integral curves, singular points, limit cycles

Arhutik, G. M. A regular singular point of higher order ordinary linear differential equations. (Russian. English summary) **80h:34034**
Bautin, A. N. On the nonlocal application of the method of small parameter. **80a:34029**
Čerkas, L. A. Conditions for a center for the equation $yy' = \sum_{i=0}^{3} p_i(x) y^i$. (Russian) **80d:34032**
A condition for distinguishing between the center and the focus of Liénard's equation. (Russian. English summary) **80b:34028**
The degree of structural instability of the focus in the Liénard equation. (Russian. English summary) **80i:34039**
Chiappinelli, R. (*with* Stuart, Charles A.) Bifurcation when the linearized problem has no eigenvalues. **80a:34030**
Diener, Francine Famille d'équations à cycle limite unique. (English summary) **80m:34025**
Dolov, M. V. Differential equations that have Darboux integrals. (Russian) **80i:34040**
Evdokimenko, R. M. Investigation in the large of a dynamical system in the presence of a given integral curve. (Russian) **80c:34025**
Jančuk, L. F. Boundedness and uniform and bounded stability of solutions of Pfaffian linear systems. (Russian. English summary) **80i:34041**
Kajumov, D. H. The behavior of the characteristics and limit manifolds in a neighborhood of the origin of a system of three differential equations. (Russian. Uzbek summary) **80j:34028**
Kirnickaja, È. F. (*with* Sibirskiĭ, K. S.) Conditions for two centers for a quadratic differential system. (Russian) **80d:34033**
Liu, Shi Ze The differential calculus by Ljapunov V-functions in the qualitative theory of singular points. (Chinese) **80e:34015**
Lloyd, N. G. A note on the number of limit cycles in certain two-dimensional systems. **80k:34039**
Martynov, I. P. Properties of the solutions of a third-order differential equation. (Russian. English summary) **80m:34026**
Matatov, V. I. Movable singularities of a second-order system. (Russian) **80d:34034**
McCann, Roger C. Separatrices for dynamical systems. **80i:34042**
Melvin, Peter J. The phase-shifting limit cycles of the van der Pol equation. **80d:34035**
Nozdračeva, V. P. A congruence function in the vicinity of a structurally stable saddle. (Russian) **80i:34043**
Successor functions in the neighborhood of a singular cycle. (Russian) **80i:34044**
Behavior of the trajectories of a three-dimensional homogeneous system in the neighborhood of a singular invariant cone. (Russian) **80i:34045**
Obidina, N. I. The existence of a trajectory going from one singular point to another. (Russian) **80f:34028**
Raisov, M. R. *See* **Šaripov, Š. R., 80c:34026**
Sadovskiĭ, A. P. On conditions for a center and focus for nonlinear oscillation equations. (Russian) **80k:34040**
A functional method of determining the conditions for a center. (Russian. English summary) **80h:34035**

Šaripov, Š. R. (*with* Raisov, M. R.) Periodic trajectories of a generalized homogeneous differential system. (Russian) **80c:34026**

Semenova, N. N. Existence of homoclinic points in the neighborhood of a center. (Russian. English summary) **80l:34046**

Sestier, Andrés Note on a theorem of Berlinskiĭ. **80k:34041**

Sibirskiĭ, K. S. *See* **Kirnickaja, È. F., 80d:34033**

Skitovič, A. V. The problem of center in the case of a complex stationary point that is separable into simple saddle points. (Russian) **80b:34029**

Špigel'man, È. S. The existence of regular solutions of a plane quadratic system. (Russian) **80k:34042**

Stoljarov, V. V. The study of dynamical systems that have a given particular integral. (Russian) **80c:34027**

Stuart, Charles A. *See* **Chiappinelli, R., 80a:34030**

Veresovič, P. P. Nonstationary singularities of a system of three differential equations. (Russian) **80d:34036**

Zeng, Xian Wu An existence and uniqueness theorem for limit cycles of the Liénard equation. (Chinese. English summary) **80b:34036**

Žilevič, L. I. Conditions for the existence of limit cycles in a differential equation system. (Russian. English summary) **80h:34037**

Zononov, B. D. Necessary conditions for the existence of positive cycles for systems with a limiting factor. (Russian) **80j:34029**

Sufficient conditions for the existence of positive cycles for systems with limiting factors. (Russian) **80l:34047**

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Allwright, D. J. (*with* Mees, Alistair I.) Lyapunov's method applied to the Hopf bifurcation. (**80j:34055**)

Behroozi, F. (*with* Gagnon, R.) Cyclic pursuit in a plane. (**80k:90043**)

Berezovskaja, F. S. Topological normal form of a system of two differential equations. (Russian) (**80h:58039**)

The index of a stationary point of a vector field in the plane. (Russian) (**80l:58015**)

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34C10 Zeros, disconjugacy, oscillation and comparison of solutions

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34C11 Growth, boundedness of solutions

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34C15 Nonlinear oscillations

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Rand, R. H. *See* **Johnson, T. L., (80e:70028)**
Rimarenko, V. V. Einige Aspekte der Anwendung der Störungstheorie auf Probleme der Theorie nichtlinearer Schwingungen. **(80a:70023)**
Rjabov, Ju. A. *See* **Grebenikov, E. A., (80e:70014)**
Sadovskiĭ, A. P. On conditions for a center and focus for nonlinear oscillation equations. (Russian) **(80k:34040)**
Schmidt, Günter ★Параметрические колебания. (Russian) [Parametric oscillations] **(80d:70042)**
(Staržinskiĭ, V. M.) *See* **Schmidt, Günter, (80d:70042)**
Stegel, H. Ein mathematisches Modell zur Beschreibung nichtlinearer Oszillatoren. **(80c:70024)**
(Troelstra, R.) *See* **Krein, M. G.; et al., (80d:47026)** *and* **Krein, M. G.; et al., (80h:47022)**
Ždánov, V. I. *See* **Pyragas, K. A.; et al., (80c:83020)**

34C20 Transformation and reduction of equations and systems

Balbi, J. H. Réduction de systèmes différentiels perturbés. (English and German summaries) **80h:34047**
Beklemisheva, L. A. Classification of polynomial systems with respect to birational transformations. I. (Russian) **80g:34033a**
Classification of polynomial systems with respect to birational transformations. II. (Russian) **80g:34033b**
Invariants of polynomial systems of differential equations with respect to generalized power transformations. (Russian) **80g:34034**
Beránka, Otakar Algebraic methods in the theory of global properties of the oscillatory equations $y'' = Q(t)y$. **80f:34037**
Brjuno, A. D. Divergence of a real normalizing transformation. (Russian. English summary) **80c:34035**
Bylov, B. F. Generalization of the criterion for almost reducibility. (Russian) **80m:34038**
Date, Tsutomu Classification and analysis of two-dimensional real homogeneous quadratic differential equation systems. **80f:34038**
Gol'cer, Ja. M. Some questions of normalization of parametrically perturbed systems. (Russian. Kazakh summary) **80c:34036**
Karpasjuk, V. K. A family of Hill equations with common characteristic exponents. (Russian) **80h:34048**
Kreith, Kurt Removable singularities for generalized Prüfer transformations. **80g:34035**
Lopatin, O. K. Asymptotic splitting of systems of nonlinear ordinary differential equations of high dimension. (Russian) **80c:34037**
Marhašov, L. M. The method of invariants in problems of the equivalence of ordinary equations. (Russian) **80m:34039**
Neuman, František Invariants of third-order linear differential equations and the moving frame method of É. Cartan. (Russian) **80h:34049**
Obuhov, A. M. Structure and questions of the modeling of quadratically nonlinear systems. (Russian) **80j:34033**
See also **Višik, S. M., 80f:34039**
Palmer, Kenneth J. A characterization of exponential dichotomy in terms of topological equivalence. **80g:34036**
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Samovol, V. S. The equivalence of systems of differential equations with reducing contraction. (Russian) **80g:34037**
Spasov, N. S. Reduction of a system of differential equations to normal form. (Bulgarian. Russian and French summaries) **80j:34034**
Stanček, Svatoslav On an algebraic structure of a group of phases. (Russian summary) **80e:34022**
Taku, V. D. Hyperplanes of symmetry of a system of differential equations. (Russian) **80k:34054**
Vartamov, V. I. Kinematic similarity of linear almost periodic systems. (Russian) **80i:34058**
Višik, S. M. (*with* Obuhov, A. M.) Symmetrizable and Hamiltonian systems. (Russian) **80f:34039**
Vulpe, N. I. Construction of a polynomial basis of comitants of a differential system. (Russian) **80j:34035**
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Fel'štyn, A. L. Morse-Smale systems on a three-dimensional sphere. (Russian. English summary) **(80k:58061)**
Fodčuk, V. I. *See* **Bortei, M. S., (80h:34087)**
Howland, Robert A., Jr. An improved transformation-elimination technique for the solution of perturbed Hamiltonian systems. **(80i:70012)**
Kirchgraber, Urs Sur les propriétés géométriques au voisinage d'une variété invariante. (English summary) **(80k:58067)**
Kohmoto, Tomonori *See* **Kohno, Mitsuhiko; et al., (80j:34071)**
Kohno, Mitsuhiko (*with* Ohkohchi, Shigemi; Kohmoto, Tomonori) On full uniform simplification of even-order linear differential equations with a parameter. **(80j:34071)**
Nikitina, N. V. A special case of a mapping of coordinates of a nonholonomic dissipative system. (Russian) **(80b:70021)**
Ohkohchi, Shigemi *See* **Kohno, Mitsuhiko; et al., (80j:34071)**
Petrovskiĭ, G. N. The construction of coefficient tests for the G-orthogonal reducibility and G-spherical compatibility of systems of linear differential equations. (Russian) **(80b:34009)**
Posluszny, Jeffrey (*with* Rubel, Lee A.) The motions of an ordinary differential equation. **(80m:58036)**
Röhrl, Helmut Finite-dimensional algebras without nilpotents over algebraically closed fields. **(80e:17004)**
Rubel, Lee A. *See* **Posluszny, Jeffrey, (80m:58036)**
Taku, V. D. Cubic invariants of a multidimensional differential system with quadratic nonlinearities. (Russian) **(80i:34010)**
Van Dooren, René Second form of the generalized Hamilton-Jacobi method for nonholonomic dynamical systems. (French summary) **(80b:70026)**

34C25 Periodic solutions

Agarwal, Ravi P. On periodic solutions of nonlinear second-order differential systems. **80d:34046**
Allwright, D. J. *See* **Mees, Alistair I., 80g:34041**
Barreto, Aristides C. Periodic solutions of nonautonomous systems. (Portuguese) **80e:34023**
Bass, Jean Solutions presque-périodiques d'un système différentiel non linéaire. (English summary) **80b:34040**
Bowman, T. T. Periodic solutions of Liénard systems with symmetries. **80g:34038**
Butler, G. J. (*with* Freedman, H. I.) Periodic solutions of $x'' + f(\mu, x) = 0$. **80j:34036**
Cronin-Scanlon, Jane Branching of periodic solutions of nonautonomous systems. **80d:34047**
Bifurcation of periodic solutions. **80m:34040**
Dai, Lo Sheng On the existence, uniqueness, and global asymptotic stability of the periodic solution of the modified Michaelis Menten mechanism. **80c:34039**

Denkina, T. N. Supporting planes and periodic solutions of third order dynamical systems. (Russian) **80a:34041**

Ezello, James O. C. Further results on the existence of periodic solutions of a certain third order differential equation. (Italian summary) **80m:34041**

Further results on the existence of periodic solutions of a certain third-order differential equation. (Italian summary) **80j:34037**

Farkaš, M. Estimates on the existence regions of perturbed periodic solutions. **80m:34042**

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Freedman, H. I. *See* **Butler, G. J., 80j:34036**

Granas, Andrzej (*with* Guenther, Ronald B.; Lee, John W.) Remarks on positive periodic solutions for second order differential equations. (Russian summary) **80c:34040**

Guenther, Ronald B. *See* **Granas, Andrzej; et al., 80c:34040**

Gupta, Chaitan P. Angle-bound operators and uniqueness of periodic solutions of certain ordinary differential equations. **80j:34038**

Periodic solutions for coupled first-order systems of ordinary differential equations. **80i:34059**

Gustomesov, V. A. Simple cycles in relay-sampled data systems. (Russian) **80c:34041**

Hamedani, G. G. On periodic solutions of nonlinear second order ordinary differential equations. (Czech summary) **80a:34042**

Hetzer, Georg A note on periodic solutions of second order systems of nonlinear autonomous differential equations. (Russian summary) **80g:34039**

Ivanov, B. F. Stability of trajectories that do not leave the neighborhood of a homoclinic curve. (Russian) **80j:34039**

Kalinowski, Józef A theorem supplementing a result of James A. Yorke. **80c:34042**

Knežević, Julka Investigation of periodic and almost periodic solutions of ordinary differential equations. (Russian) **80k:34055**

Konstantinov, M. S. On a third order equation. (Russian) **80a:34043**

Laloux, B. Multiplicity and bifurcation of periodic solutions in ordinary differential equations. **80g:34040**

Landman, K. A. Bifurcation and stability of periodic solutions from a zero eigenvalue. **80j:34040**

Lee, John W. *See* **Granas, Andrzej; et al., 80c:34040**

Le Lyong Taĭ Stability of periodic solutions of a class of differential equations. (Russian) **80k:34056**

See also **Samoilenko, A. M., 80e:34025**

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A general method for the construction of periodic trajectories of autonomous systems of differential equations with a small parameter and with semi-odd nonlinearities in the presence of inner resonance. I, II. (Bulgarian. Russian and French summaries) **80i:34061**

An invariant and its relation to the period of the corresponding trajectory for nonlinear autonomous systems. (Russian) **80i:34062**

Martelli, Mario On forced nonlinear oscillations. **80h:34051**

Mawhin, Jean (*with* Walter, Wolfgang) Periodic solutions of ordinary differential equations with one-sided growth restrictions. **80i:34063**

Mees, Alistair I. (*with* Allwright, D. J.) Using characteristic loci in the Hopf bifurcation. **80g:34041**

Mehri, B. A note on periodic solutions of certain second-order nonlinear differential equations. **80k:34057**

Obi, Chike Analytical theory of non-linear oscillations. VIII. Second-order conservative systems whose solutions are all oscillating with the least period 2π. **80d:34048**

Ouansafi, Abdellatif Existence et unicité de solutions périodiques pour certains systèmes différentiels ordinaires du premier ordre fortement non linéaires. **80j:34041**

Pačin, M. F. Isolated periodic solutions of a class of systems with switching on the plane. (Russian) **80a:34044**

Palmer, Kenneth J. On the existence of periodic solutions of a nonlinear vector differential equation. **80k:34058**

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Pavljuk, Ĭ. A. (*with* Pasenčenko, Ju. A.) Construction of periodic solutions of nonautonomous systems of ordinary differential equations. (Russian) **80b:34042**

Perestjuk, M. O. (*with* Šovkopljas, V. N.) Periodic solutions of nonlinear differential equations with an impulse influence. (Russian) **80j:34042**

Podolak, E. (*with* Westreich, David) Systems of first order differential equations with global periodic solutions. **80k:34059**

Rabinowitz, Paul H. A variational method for finding periodic solutions of differential equations. **80b:34043**

Raeva, M. B. Resonance periodical trajectories of autonomous systems with polynomial $G_{n,2}$ nonlinearities. I. (Bulgarian. English and Russian summaries) **80d:34049**

On resonance periodic trajectories of autonomous systems with polynomial $G_{n,2}$ nonlinearities. II. (Bulgarian. Russian and English summaries) **80k:34060**

Reissig, Rolf Periodic solutions of certain higher order differential equations. **80b:34044**

Periodic solutions of a second-order differential equation including a one-sided restoring term. **80j:34043**

Rigani, Riccardo Subharmonic solutions of the Duffing equation with large non-linearity. (French and German summaries) **80d:34050**

Rosa, Vladislav On periodic solutions of the fourth-order linear systems. (Slovak and Russian summaries) **80e:34024**

Samoilenko, A. M. (*with* Le Lyong Taĭ) A numerical analytic method for independent systems with small perturbation. (Russian) **80e:34025**

Salin, A. I. Analytic sets of periodic solutions of quasi-Liouville systems. A one-parameter case. (Russian. English summary) **80f:34040**

Scheurle, Jürgen Bifurcation of a stationary solution of a dynamical system into n-dimensional tori of quasiperiodic solutions. **80k:34061**

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Szilárd, Károly On ordinary first-order differential equations in normal form whose right-hand sides are periodic functions of the independent variable. (Hungarian) **80k:34062**

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Walter, Wolfgang *See* **Mawhin, Jean, 80i:34063**

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Ekeland, Ivar *See* **Clarke, Frank H., (80j:49005)**

Epstein, D. B. A. (*with* Vogt, E.) A counterexample to the periodic orbit conjecture in codimension 3. **(80c:57014)**

Erle, Dieter Stable closed orbits in plane autonomous dynamical systems. **(80d:58056)**

(*with* Mayer, Karl Heinz; Plesser, Theodor) The existence of stable limit cycles for enzyme catalyzed reactions with positive feedback. **(80h:92002)**

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Gaĭšun, I. V. The total derivative equations with periodic coefficients. (Russian. English summary) **(80j:34078)**

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Grasman, J. (*with* Jansen, M. J. W.; Veling, E. J. M.) Asymptotic methods for relaxation oscillations. **(80m:34053)**

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Helleman, Robert H. G. (*with* Bountis, Tassos) Periodic solutions of arbitrary period, variational methods. **(80k:70027)**

Hsü, In Ding On the existence of nonlocal, periodic solutions for a fourth-order system. **(80b:65117)**

Jansen, M. J. W. *See* **Grasman, J.; et al., (80m:34053)**

Katopodis, K. Continuation of periodic orbits: three-dimensional circular restricted to the general three-body problem. **(80b:70013)**

Kielhöfer, Hansjörg Hopf bifurcation at multiple eigenvalues. **(80d:58045)**

Kurata, Masahiro Hyperbolic nonwandering sets without dense periodic points. **(80d:58052)**

Laptinskiĭ, V. N. An algorithm for the construction of periodic solutions of second order linear systems. (Russian. English summary) **(80a:34011)**

Mallet-Paret, John *See* **Chow, Shui Nee; et al., (80a:58015)**

Mayer, Karl Heinz *See* **Erle, Dieter; et al., (80h:92002)**

Mehri, B. Forced nonlinear oscillation for certain third order differential equations. **(80c:34015)**

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A model of the stimulation of B-cells by replicating antigen. II. **(80h:92006b)**

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A contribution to the three-dimensional Copenhagen problem. **(80c:70008)**

On the continuation of periodic orbits from the planar to the three-dimensional general three-body problem. **(80i:70010)**

(Mitropol'skiĭ, Ju. O.) *See* **Samoilenko, A. M.; et al., (80k:65075)**

Nitecki, Zbigniew A periodic attractor determined by one function. **(80c:92038)**

Oliva, W. M. Restricted three-body problem: a theorem of Poincaré-Birkhoff on the existence of periodic orbits. (Portuguese) **(80e:70010)**

Owen, David R. *See* **Buhite, Jack L., (80i:73023)**

Pietruszka, W. D. Zur Berechnung periodischer Lösungen in Systemen mit Reibung. **(80f:70024)**

Plesser, Theodor *See* **Erle, Dieter; et al., (80h:92002)**

Rodrigues, Hildebrando M. (*with* Vanderbauwhede, André L.) Symmetric perturbations of nonlinear equations: symmetry of small solutions. **(80b:47087)**

Rogačev, V. M. The stability of periodic oscillations of nonlinear systems. (Russian) **(80e:70029)**

Ronto, N. I. *See* **Samoilenko, A. M., (80k:65075)**

Rosenblat, S. (*with* Davis, Stephen H.) Bifurcation from infinity. **(80d:76009)**
Samoĭlenko, A. M. (*with* Ronto, N. I.) ★Numerical-analytic methods of investigating periodic solutions. **(80k:65075)**
Sansone, G. The Minorsky stroboscopic method applied to the Mathieu-Van der Pol oscillator. (Russian summary) **(80c:34059)**
Sędziwy, Stanisław Boundedness of solutions of an nth order nonlinear differential equation. (Italian summary) **(80k:34050)**
Shinohara, Yoshitane (*with* Yamamoto, Norio) Galerkin approximations of periodic solution and its period to van der Pol equation. **(80a:65178)**
(Šokurov, Vladimir) *See* **Samoĭlenko, A. M.; et al., (80k:65075)**
Stech, Harlan W. The Hopf bifurcation: a stability result and application. **(80k:34100)**
Straškraba, Ivan (*with* Vejvoda, Otto) Correction: "Periodic solutions to abstract differential equations" (Czechoslovak Math. J. 23(98) (1973), 635–669). **(80c:34062)**
Vanderbauwhede, André L. *See* **Rodrigues, Hildebrando M., (80b:47087)**
Vejvoda, Otto *See* **Straškraba, Ivan, (80c:34062)**
Veling, E. J. M. *See* **Grasman, J.; et al., (80m:34053)**
Vogt, E. *See* **Epstein, D. B. A., (80c:57014)**
Wang, Xian *See* **Ye, Yan Qian, (80f:34014)**
Weinstein, Alan D. Simple periodic orbits. **(80d:70044)**
Yamamoto, Norio *See* **Shinohara, Yoshitane, (80a:65178)**
Ye, Yan Qian (*with* Wang, Xian) Nonlinear differential equations arising in the theory of electron beam focusing. (Chinese) **(80f:34014)**
Yorke, James A. *See* **Chow, Shui Nee; et al., (80a:58015)**
Žuravlev, S. G. Conditionally periodic solutions of the canonical systems of differential equations in nonautonomous resonant case. **(80f:70023)**

34C27 Almost-periodic solutions

Barančikov, V. A. *See* **Terehin, M. T., 80a:34048**
Blavac'ka, L. Ĭ. *See* **Lisevič, L. M., 80k:34064**
Domínguez Benavides, Tomás Dynamical system for a nonautonomous differential equation with α-Lipschitz operator. **80j:34044**
Itō, Akira A perturbation theory of a quasiperiodic motion. An asymptotic expansion method. **80j:34045**
Konstantinov, M. M. (*with* Velev, V. A.) Globally bounded and almost periodic solutions of a system of differential equations, implicit in the derivative. (Bulgarian. Russian and English summaries) **80k:34063**
Lisevič, L. M. (*with* Blavac'ka, L. Ĭ.) Almost periodicity of the solution of a quasilinear system of ordinary differential equations. (Ukrainian. Russian summary) **80k:34064**
Roseau, Maurice Régimes quasi périodiques dans les systèmes vibrants non linéaires. **80a:34047**
Simirad, Constantin Sur les solutions périodiques et presque-périodiques des équations différentielles du premier ordre. **80d:34053**
Sur les solutions périodiques et presque-périodiques des systèmes d'équations différentielles non-linéaires du premier ordre. **80j:34046**
Terehin, M. T. (*with* Barančikov, V. A.) A variational method for the proof of the existence of almost periodic solutions of a system of ordinary differential equations. (Russian) **80a:34048**
Velev, V. A. *See* **Konstantinov, M. M., 80k:34063**

Secondary classifications:

Campanini, Rita (*with* Risito, Corrado) Existence theorem for almost periodic solutions of periodic systems with time lag. **(80h:34089)**
Knežević, Julka Investigation of periodic and almost periodic solutions of ordinary differential equations. (Russian) **(80k:34055)**
Risito, Corrado *See* **Campanini, Rita, (80h:34089)**

34C28 Other types of "recurrent" solutions

Bibikov, Ju. N. Representation of quasi-periodic motions near the equilibrium state with the aid of convergent power series. (Russian) **80b:34046**
Dall'Aglio Angelotti, Anita An observation on the concept of strong stability. (Italian. English summary) **80h:34054**
Parasjuk, Ĭ. O. Parametric resonance in linear Hamiltonian systems with quasiperiodic coefficients. (Russian) **80b:34047**
Sartabanov, Ž. A. Propagation of the idea of the Poincaré method to the case of pseudoperiodic functions. (Russian) **80j:34047**

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Ishii, Ippei On the first cohomology group of a minimal set. **(80b:58051)**
Umbetžanov, D. U. ★Почти многопериодические решения дифференциальных уравнений в частных производных. (Russian) [Almost multiperiodic solutions of partial differential equations] **(80h:35008)**

34C29 Averaging method [See also 47H10.]

Ahljustin, V. I. (*with* Petuhov, Ju. M.) Application of the averaging method in the problem of the interaction of atoms with radio frequency fields. (Russian. English summary) **80e:34026**
Bainov, D. D. *See* **Mitropol'skiĭ, Ju. O.; et al., 80j:34048**
Cleave, John P. Generic bifurcations of forced oscillations of integrable mechanical systems. **80b:34048**
Dawidowski, Marian On some generalization of Bogoliubov averaging theorem. **80m:34043**
Hapaev, M. M. The averaging and investigation of stability in multifrequency systems of ordinary differential equations. (Russian) **80b:34049**
Holmes, Philip J. Averaging and chaotic motions in forced oscillations. **80m:34044**
Jarovoĭ, A. T. *See* **Plotnikov, V. A., 80g:34042**
Karkinbaĕv, Ĭ. On the question of justification of the method of averaging for systems of differential equations with impulse action. (Russian) **80h:34055**
Kinoshita, Hiroshi A note on the averaging method. **80a:34049**
Miluševa, Svetla D. *See* **Mitropol'skiĭ, Ju. O.; et al., 80j:34048**
Mirkina, A. S. On a modification of the averaging method and estimates of higher approximations. **80h:34056**
Mitropol'skiĭ, Ju. O. (*with* Baĭnov, D. D.; Miluševa, Svetla D.) Application of the averaging method to the solution of boundary value problems for ordinary differential and integro-differential equations. (Russian) **80j:34048**
(*with* Samoĭlenko, A. M.) On the question of asymptotic expansions of nonlinear mechanics. (Russian) **80c:34043**
Nosov, S. L. Averaging of systems of $n+m$ variables. (Russian) **80j:34049**
Petuhov, Ju. M. *See* **Ahljustin, V. I., 80e:34026**
Plahtienko, N. P. The method of two-frequency representation in the theory of periodically perturbed quasilinear systems. (Russian) **80j:34050**
Plotnikov, V. A. (*with* Jarovoĭ, A. T.) Justification of a certain averaging scheme for systems of standard form on a finite interval. (Russian) **80g:34042**
Rakin, L. V. Estimation of the solutions of a countable system of differential equations with a small parameter. (Russian) **80j:34051**
Samoĭlenko, A. M. *See* **Mitropol'skiĭ, Ju. O., 80c:34043**
Sarlet, Willy On a common derivation of the averaging method and the two-timescale method. **80a:34050**
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Vitins, M. Error bounds in the method of averaging based on properties of average motion. **80b:34050**

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(*with* Miluševa, Svetla D.) Application of partial averaging to the solution of multipoint boundary value problems for a class of differential equations with deviating argument. (Russian. Bulgarian and English summaries) **(80k:34093)**
Bajaj, A. K. *See* **Sethna, P. R., (80e:34029)**
Dellwo, David R. (*with* Friedman, Morton B.) Uniform asymptotic solutions for a differential equation with an almost periodic coefficient. **(80b:34068)**
Falin, A. I. Investigation of the stability of periodic and quasistatistical solutions in the "neutral" case by the averaging method. (Russian) **(80c:34054)**
Fenichel, Neil Geometric singular perturbation theory for ordinary differential equations. **(80m:58032)**
Ferraz Mello, Sylvio Lie mappings and formal solutions. (Portuguese) **(80g:58029)**
Friedman, Morton B. *See* **Dellwo, David R., (80b:34068)**
Hodžaev, K. Š. *See* **Reĭmers, N. A., (80b:34067)**
Kirchgraber, Urs (*with* Stiefel, Eduard) ★Methoden der analytischen Störungsrechnung und ihre Anwendungen. **(80k:70001)**
Kosolapov, V. I. *See* **Martinjuk, A. A., (80j:34060)**
Loginov, V. M. Averaging in systems of integro-differential equations of special type. (Russian) **(80e:45009)**
Maksudov, R. The asymptotic expansion of solutions of some integro-differential equations. (Russian) **(80a:45026)**
Martinjuk, A. A. (*with* Kosolapov, V. I.) The comparison principle and the averaging method in the problem of the stability of nonasymptotic steady-state motions under constantly acting perturbations. (Russian) **(80j:34060)**
The Ljapunov-Čaplygin comparison principle for standard systems. (Russian) **(80i:34075)**
Melloni, Franca Gallerani A particular nonlinear third-order differential equation. (Italian. English summary) **(80i:34071)**
Miluševa, Svetla D. *See* **Baĭnov, D. D., (80h:45009)** *and* **Baĭnov, D. D., (80k:34093)**
Murdock, J. A. Qualitative dynamics from asymptotic expansions. **(80g:58041)**
Osiński, Zbigniew ★Teoria drgań. (Polish) [Theory of vibrations] **(80d:70001)**
Plotnikov, V. A. Averaging method for differential inclusions and its application to optimal control problems. (Russian) **(80h:34014)**
Averaging of differential inclusions. (Russian) **(80j:34017)**
Reĭmers, N. A. (*with* Hodžaev, K. Š.) Averaging of quasilinear systems with several fast variables. (Russian) **(80b:34067)**
Samoĭlenko, V. G. Study of a system of two weakly connected equations of van der Pol type. (Russian) **(80a:34040)**
Sethna, P. R. (*with* Bajaj, A. K.) Bifurcations in dynamical systems with internal resonance. **(80e:34029)**
Sobolevskiĭ, E. P. An averaging principle and stability of differential equations with a small parameter. (Russian) **(80j:34081)**
Stiefel, Eduard *See* **Kirchgraber, Urs, (80k:70001)**
Vandewiele, M. E. L. Sur une équation de Mathieu avec amortissement non linéaire. **(80j:34066)**
Vul'pe, I. M. The determination of periodic solutions of nonlinear systems by the averaging method. (Russian) **(80a:35011)**
Weinstein, Alan D. Simple periodic orbits. **(80d:70044)**

34C30 Manifolds of solutions

Baris, Ja. S. The reduction principle for a singularly perturbed system. (Russian) **80i:34065**
Bogojavlenskiĭ, O. I. Nonlinear oscillation regimes in some physical problems. **80j:34053**
Johnson, Russell A. On a theorem of Sell. **80g:34043**
Kulik, V. L. *See* **Samoĭlenko, A. M., 80b:34051** *and* **Samoĭlenko, A. M., 80i:34066**
Samoĭlenko, A. M. (*with* Kulik, V. L.) Continuity of the Green function of the problem of the invariant torus. (Russian) **80b:34051**
(*with* Kulik, V. L.) Exponential dichotomy of an invariant torus of dynamical systems. (Russian) **80i:34066**
Ueda, Yoshisuke Randomly transitional phenomena in the system governed by Duffing's equation. **80b:34052**

Secondary classifications:

Sobolev, V. A. Investigation of differential equations with small parameters multiplying derivatives by the method of integral manifolds. (Russian) **(80k:34075)**

Umbetžanov, D. U. ★Почти многопериодические решения дифференциальных уравнений в частных производных. (Russian) [Almost multiperiodic solutions of partial differential equations] **(80h:35008)**

34C35 Dynamical systems [See also 54H20, 58Fxx, 70–XX.]

Allen, J. S. *See* **Grimshaw, R. H. J., 80e:34027**

Bajaj, A. K. *See* **Sethna, P. R., 80e:34029**

Barbašin, E. A. ★Метод сечений в теории динамических систем. (Russian) [Method of sections in the theory of dynamical systems] **80i:34067**

Bartlett, James H. Instability of an area-preserving polynomial mapping. **80a:34051a**

Caprino, Silvia (*with* Negrini, P.; Scalia, M.) Asymptotic and total stability for generalized dynamical systems. **80d:34054**

Feigin, M. I. On the behavior of dynamic systems in the vicinity of existence boundaries of periodic motions. **80i:34068**

Franke, John E. (*with* Selgrade, James F.) A computer method for verification of asymptotically stable periodic orbits. **80b:34053**

Grimshaw, R. H. J. (*with* Allen, J. S.) Linearly coupled, slowly varying oscillators. **80e:34027**

Johnson, Russell A. Ergodic theory and linear differential equations. **80c:34044**
Measurable subbundles in linear skew-product flows. **80c:34045**

Kononjuk, V. O. Determination of the time of transient processes in third-order nonperiodic systems. **80e:34028**

Lochak, Georges Sur une extension du théorème de Floquet à des systèmes dynamiques non linéaires dérivant d'un hamiltonien périodique par rapport au temps. (English summary) **80i:34069**

Nagy, Jozef (*with* Nováková, Eva) Local determinacy of abstract right pseudoprocesses. (Czech and Russian summaries) **80h:34057**

Negrini, P. *See* **Caprino, Silvia; et al., 80d:34054**

Nováková, Eva *See* **Nagy, Jozef, 80h:34057**

Oliva, W. M. Examples of models in ordinary differential equations. (Portuguese) **80d:34055**

Reyn, J. W. A stability criterion for separatrix polygons in the phase plane. **80f:34041**

Scalia, M. *See* **Caprino, Silvia; et al., 80d:34054**

Selgrade, James F. *See* **Franke, John E., 80b:34053**

Sethna, P. R. (*with* Bajaj, A. K.) Bifurcations in dynamical systems with internal resonance. **80e:34029**

Simonov, A. A. A study of the bifurcations in certain dynamical systems by the methods of symbolic dynamics. (Russian) **80d:34056**

Sree Hari Rao, V. On boundedness of impulsively perturbed systems. **80d:34057**

Vdovina, È. V. A second inverse problem of the qualitative theory of differential equations. (Russian) **80a:34052**

Walker, J. A. Some results on Liapunov functions and generated dynamical systems. **80c:34046**
Erratum: "Some results on Liapunov functions and generated dynamical systems" [J. Differential Equations **30** (1978), no. 3, 424–440; MR 80c:34046]. **80k:34065**

Wojciechowski, S. Completely integrable systems of N particles in one dimension. **80a:34053**

Secondary classifications:

Afraimovič, V. S. (*with* Šil'nikov, L. P.) The ring principle in problems of interaction between two self-oscillating systems. **(80k:70019)**

Baranov, A. S. Near-circular motion of a star inside an axially symmetric heterogeneous ellipsoidal cluster. (Russian. English summary) **(80a:85001)**

Bogojavlenskiĭ, O. I. Nonlinear oscillation regimes in some physical problems. **(80j:34053)**

Bolotin, S. V. Libration motions of natural dynamical systems. (Russian. English summary) **(80d:70021)**

Bothe, H. G. A modification of the Kupka-Smale theorem and smooth invariant manifolds of dynamical systems. **(80i:58029)**

Camacho, Maria Izabel Tavares Generic properties of homogeneous vector fields of degree two in $\mathbf{R}^3$. **(80k:58060)**

Cushman, Richard The relationship between the index of a strongly stable periodic linear Hamiltonian vectorfield and the index of its stability domain. **(80g:58027)**
Corrections to: "The relationship between the index of a strongly stable periodic linear Hamiltonian vectorfield and the index of its stability domain" [Duke Math. J. **45** (1978), no. 4, 701–709; MR 80g:58027]. **(80k:58047)**

Đaja, Časlav Quasirecurrent motions of dynamical systems in metric spaces. (Serbo-Croatian. German summary) **(80k:54075)**

Dankert, Gabriele (*with* Seibert, Peter) Asymptoticity of general systems and Liapunov families. **(80j:54035)**

Denzel, B. (*with* Seelig, F. F.) Calculation of separatrices in multistable chemical reaction systems. **(80a:65163)**

Domínguez Benavides, Tomás Dynamical system for a nonautonomous differential equation with α-Lipschitz operator. **(80j:34044)**

Easton, Robert W. (*with* McGehee, Richard) Homoclinic phenomena for orbits doubly asymptotic to an invariant three-sphere. **(80c:58017)**

Franke, John E. (*with* Selgrade, James F.) Hyperbolicity and cycles. **(80b:58047)**

Franks, John M. The structure of Smale diffeomorphisms. **(80e:58030)**
The periodic structure of nonsingular Morse-Smale flows. **(80k:58062)**
Morse-Smale flows and homotopy theory. **(80k:58063)**

Glikman, L. G. On the problem of two bodies of variable mass. **(80a:70026)**

González-Gascón, F. Two global first integrals of certain dynamical systems. **(80g:58030)**
Reduction of vector fields to Newton-like vector fields. **(80g:58044)**

Gürel, Okan (*with* Rössler, Otto E.) Bifurcation to toroidal surfaces. **(80d:58044)**

Gutiérrez, Carlos Smooth nonorientable nontrivial recurrence on two-manifolds. **(80d:58059)**

Harlamov, M. P. Some applications of differential geometry in the theory of mechanical systems. (Russian) **(80h:70014)**

Henrard, Jacques (*with* Renard, Jacqueline) Note on the paper: " Sur de nouvelles séries pour le problème de masses critiques de Routh dans le problème restreint plan des trois corps" (Celestial Mech. **12** (1975), no. 3, 327–336) by J. Roels. **(80a:70015)**

Honary, B. G-equivariant—Hartman's theorem. **(80k:58066)**

Huang, Yün Ming Stability and normal hyperbolicity of ω-linear vector fields on manifolds. **(80a:58022)**

Jongen, H. Th. (*with* Jonker, P.; Twilt, F.) On Newton flows in optimization. **(80k:58044)**

Jonker, P. *See* **Jongen, H. Th.; et al., (80k:58044)**

Knight, Ronald A. Compact dynamical systems. **(80c:54050)**

Kočiev, A. A. New intermediate orbits of a point of small mass in the restricted three-body problem. **(80a:70014)**

Kononjuk, V. O. Time of transient response of a linear vibratory second-order system. (Russian) **(80g:93014)**

Lukackiĭ, A. M. The system of generators of the group of diffeomorphisms of an n-dimensional torus. (Russian) **(80k:58030)**

Markley, Nelson G. Invariant simple closed curves on the torus. **(80k:54076)**

McCann, Roger C. Dynamical systems whose orbit spaces are nearly Hausdorff. **(80g:54048)**

McGehee, Richard *See* **Easton, Robert W., (80c:58017)**

Messori, Bruno A particular nonholonomic dynamical system similar to that of the circle. (Italian) **(80i:70005)**

Mjačin, V. F. Some variants of the regularization for a double encounter in the n-body problem. (Russian. English summary) **(80a:70017)**

Morse, Marston Lacunary type number sequences in global analysis. **(80k:58035)**

Neĭmark, Ju. I. Invariant manifolds and stochastic motion of dynamical systems. (Russian) **(80d:58054)**
Synchronization and stochasticity. (Russian) **(80d:58042)**
★Динамические системы и управляемые процессы. (Russian) [Dynamical systems and control processes] **(80d:93006)**

Pavlovskiĭ, Ju. N. Aggregation, decomposition, group properties, decompositional structures of dynamical systems. (Russian) **(80d:58028)**

Pelczar, Andrzej A local version of the generalized retract theorem of Ważewski with applications in the theory of partial differential equations of first order. **(80i:54050)**

Pianigiani, Giulio (*with* Yorke, James A.) Expanding maps on sets which are almost invariant. Decay and chaos. **(80i:58030)**

Prüfer, Michael Calculating global bifurcation. **(80g:65058)**

Rabinovič, M. I. Stochastic self-oscillations and turbulence. **(80k:58076)**

Renard, Jacqueline *See* **Henrard, Jacques, (80a:70015)**

(Roels, J.) *See* **Henrard, Jacques; et al., (80a:70015)**

Rössler, Otto E. *See* **Gürel, Okan, (80d:58044)**

Seelig, F. F. *See* **Denzel, B., (80a:65163)**

Seibert, Peter Some recent developments in stability of general systems. **(80i:34081)**
See also **Dankert, Gabriele, (80j:54035)**

Selgrade, James F. *See* **Franke, John E., (80b:58047)**

Shub, Michael ★Stabilité globale des systèmes dynamiques. **(80c:58015)**

Šil'nikov, L. P. *See* **Afraimovič, V. S., (80k:70019)**

Svanidze, N. V. Existence of invariant tori for a three-dimensional billiard, which are concentrated in the vicinity of a "closed geodesic on the boundary region". (Russian) **(80k:58086)**

Takens, Floris Global phenomena in bifurcations of dynamical systems with simple recurrence. **(80f:58034)**

Twilt, F. *See* **Jongen, H. Th.; et al., (80k:58044)**

Visentin, Francesca On the ordinal and absolute stability properties. (Italian summary) **(80g:54045)**

Wilson, F. Wesley, Jr. A reformulation of Coleman's conjecture concerning the local conjugacy of topologically hyperbolic singular points. **(80e:58034)**

Yorke, James A. *See* **Pianigiani, Giulio, (80i:58030)**

34C40 Equations and systems on manifolds [See mainly 58Fxx, 58Gxx.]

Ščerbina, E. S. On the general theory of the vibroprotection of dynamical systems. (Russian. English summary) **80i:34070**

Secondary classifications:

Palis, Jacob Dynamical systems. (Portuguese) **(80d:58036)**

Šil'nikov, L. P. Bifurcation theory of dynamical systems with homoclinic Poincaré curves. (Russian) **(80d:58048)**

Wan, Yieh Hei Bifurcation into invariant tori at points of resonance. **(80b:58046)**

34C45 Method of integral manifolds

34C50 Method of accelerated convergence

Secondary classifications:

Morgan, John C., II On the absolute Baire property. **(80f:54022)**

Roseau, Maurice Régimes quasi périodiques dans les systèmes vibrants non linéaires. **(80a:34047)**

34C99 None of the above, but in this section

Demidovič, B. P. (*with* Malyšev, Ju. V.) A study of the neighborhood of invariant and exceptional sets. (Russian. English summary) **80a:34054**

Krasnosel'skiĭ, A. M. A criterion of convexity for integral curves. (Russian) **80k:34066**
Malyiev, Ju. V. *See* **Demidovič, B. P., 80a:34054**
Sagalovič, M. E. Classes of local topological structures of the equilibrium state. (Russian) **80g:34044**
Spikes, Paul W. On the integrability of solutions of perturbed nonlinear differential equations. **80h:34058**
Troesch, Albert (*with* Urlacher, Émile) Perturbations singulières et analyse non standard. (English summary) **80c:34047**
Urlacher, Émile *See* **Troesch, Albert, 80c:34047**

Secondary classifications:

Amann, Herbert Saddle points and multiple solutions of differential equations. **(80j:47078)**
Bulatov, P. K. Conditions for the uniform relative motion of a material point along a rotating curve. (Russian) **(80a:70002)**
Cherruault, Yves Identification des paramètres d'échanges dans des modèles de compartiments. (English summary) **(80a:92011)**
Christol, Gilles Frobenius structures for differential equations. **(80b:14015)**
Denisik, S. A. *See* **Ferronskiĭ, V. I.; et al., (80d:85002)**
Donaldson, John D. *See* **Jezewski, Donald J., (80b:70008)**
Doubochine, G. N. Sur le problème restreint circulaire des trois corps solides. (Russian summary) **(80b:70012)**
Dragoș, Lazăr Regularization theory and the problem of two centers of gravity. (Romanian. English summary) **(80a:70004)**
Đukić, Đorđe S. On the integral invariants in classical mechanics for quasi-coordinates. **(80d:70022)**
Ferronskiĭ, S. V. *See* **Ferronskiĭ, V. I.; et al., (80d:85002)**
Ferronskiĭ, V. I. (*with* Denisik, S. A.; Ferronskiĭ, S. V.) The solution of Jacobi's virial equation for celestial bodies. **(80d:85002)**
Jezewski, Donald J. (*with* Donaldson, John D.) Coupled motion of rigid bodies about their center of mass. **(80b:70008)**
Naniev, V. S. A qualitative analysis and classification of real motions in the problem of four fixed centers. **(80f:70011)**
Nicholson, David W. Comments on damped response in linear systems. **(80b:70029)**
Nishimoto, Toshihiko Global dispersion relation for density waves in a certain simplified model of a disk shaped galaxy. **(80b:85003)**
O'Brien, G. Orbital equations in the relativistic two-body problem. **(80b:83006)**
Osipov, V. Z. (*with* Sulikašvili, R. S.) The oscillation in an elliptic orbit of a rigid body containing a spherical cavity that is entirely filled with a viscous fluid. (Russian) **(80a:70011)**
Paolicchi, Paolo A differential equation for the classical collapse problem. **(80a:83073)**
Ponzo, Peter J. (*with* Wax, Nelson) Note on a model of a biochemical reaction. **(80b:80012)**
Stickforth, J. Additional remark to: "Another regularization of the Kepler problem" (Celestial Mech. **15** (1977), no. 1, 131). **(80b:70018)**
Sulikašvili, R. S. *See* **Osipov, V. Z., (80a:70011)**
Tjurehodžaev, A. N. On the question of determining the carrying ability of piles. (Russian. Kazakh summary) **(80a:73057)**
Vujanović, B. D. Conservation laws of dynamical systems via d'Alembert's principle. (French and German summaries) **(80d:70040)**
Wax, Nelson *See* **Ponzo, Peter J., (80b:80012)**
Weber, Helmut Numerische Behandlung von Verzweigungsproblemen bei gewöhnlichen Differentialgleichungen. (English summary) **(80i:65086)**

34Dxx Stability theory [See also 58F10, 93Dxx.]

Beckert, Herbert Bemerkungen zur Theorie der Stabilität. **80b:34054**

Secondary classifications:

Gutiérrez, Carlos Smooth nonorientable nontrivial recurrence on two-manifolds. **(80d:58059)**

34D05 Asymptotic properties; characteristic exponents

Abatut, J. L. *See* **Bernussou, J.; et al., 80c:34050**
Abgarjan, K. A. (*with* Avanjan, V. T.) On the theory of stability on a given time interval. **80a:34055**
Afuwape, Anthony Uyi Frequency-domain criteria for dissipativity of some third order differential equations. **80m:34045**
Aizengendler, P. G. (*with* Oborin, L. A.) Stable singular periodic solutions of nonautonomous equations. (Russian) **80a:34056**
Aneškin, O. V. Asymptotic stability in nonlinear systems. (Russian) **80d:34058**
Aronsson, Gunnar (*with* Kellogg, R. B.) On a differential equation arising from compartmental analysis. **80c:34048**
Aulbach, B. Ebene autonome Systeme: die Bestimmung des Einzugsbereichs eines asymptotisch stabilen Grenzzyklus. **80c:34049**
Avanjan, V. T. *See* **Abgarjan, K. A., 80a:34055**
Bailieu, R. J. (*with* Peiffer, K.) Attractivity of the origin for the equation $\ddot{x} + f(t, x, \dot{x})|\dot{x}|^n \dot{x} + g(x) = 0$. **80a:34057**
Bernussou, J. (*with* Hsu, Liu; Abatut, J. L.) Sur le cas critique à deux multiplicateurs réels dans une transformation ponctuelle non linéaire du second ordre. **80c:34050**
Bijagov, Z. U. (*with* Leonov, G. A.) Frequency criteria of the stability in the large of nonlinear systems. (Russian. English summary) **80c:34051**
Burgat, Christian *See* **Grujić, Ljubomir T., 80e:34030**
Čeban, D. N. (*with* Černiĭ, V. F.) On the question of an exponential dichotomy on the half-line of the solutions of linear systems of differential equations. (Russian) **80b:34055**
Černiĭ, V. F. *See* **Čeban, D. N., 80b:34055**
Datta, Biswa Nath An elementary proof of the stability criterion of Liénard and Chipart. **80a:34058**
Dollard, John D. (*with* Friedman, Charles N.) Asymptotic behavior of solutions of linear ordinary differential equations. **80c:34052**
Elefteriadi, Ju. I. *See* **Vinograd, R. È., 80m:34049**
Ezello, James O. C. Instability theorems for certain fifth-order differential equations. **80a:34059**
Friedman, Charles N. *See* **Dollard, John D., 80c:34052**
Grudo, È. I. The stability of characteristic vectors of the solutions of linear homogeneous Pfaffian systems. (Russian) **80g:34045**
(*with* Jančuk, L. F.) On the asymptotic stability of the equilibrium state of Pfaff systems. (Russian) **80m:34046**
Grujić, Ljubomir T. (*with* Burgat, Christian) Estimations E_i du domaine de stabilité pour un système interconnecté de comparaison du type Lotka-Volterra. (English summary) **80e:34030**
Haritonov, V. L. The asymptotic stability of the equilibrium state of a family of systems of linear differential equations. (Russian) **80b:34056**
Hsu, Liu *See* **Bernussou, J.; et al., 80c:34050**
Jančuk, L. F. The asymptotic equivalence of Pfaffian systems. (Russian) **80b:34057**
See also **Grudo, È. I., 80m:34046**
Johnson, Russell A. Concerning a theorem of Sell. **80b:34058**
Kellogg, R. B. *See* **Aronsson, Gunnar, 80c:34048**
Krečetov, G. S. Asymptotic properties of solutions of a perturbed system in a critical case. (Russian. English summary) **80h:34059**
Laptinskiĭ, V. N. Coefficient tests for the stability of linear periodic systems. (Russian. English summary) **80b:34059**
Leighton, Walter Domains of attraction in the plane. **80d:34059**
Leonov, G. A. *See* **Bijagov, Z. U., 80c:34051**
Martynov, I. I. (*with* Petrovskiĭ, G. N.) The asymptotic behavior of the solutions of a linear differential system with a periodic coefficient matrix of the second kind. (Russian) **80k:34067**
Melloni, Franca Gallerani A particular nonlinear third-order differential equation. (Italian. English summary) **80i:34071**
Nosov, V. R. (*with* Prokopov, B. I.) Overall asymptotic stability of self-tuning systems with a reference model. **80a:34060**
Nurekenov, T. K. (*with* Žusanbaev, S. N.) The asymptotic stability in the first approximation of the solutions of countable systems of differential equations. (Russian) **80a:34061**
Oborin, L. A. *See* **Aizengendler, P. G., 80a:34056**
Onuchic, Nelson Invariance properties for ordinary differential equations: stability and instability. **80c:34053**
Peiffer, K. *See* **Bailieu, R. J., 80a:34057**
Petrovskiĭ, G. N. *See* **Martynov, I. I., 80k:34067**
Polniakowski, Zbigniew On some system of linear differential equations. **80a:34062**
Prokopov, B. I. *See* **Nosov, V. R., 80a:34060**
Pyžkova, N. V. Computation of the Ljapunov exponents for solutions of imbeddable systems. (Russian) **80d:34060**
Radzikowski, Jerzy Propriétés asymptotiques des solutions d'un système de deux équations différentielles linéaires homogènes du premier ordre. **80m:34047**
Rahimberdiev, M. I. (*with* Rozov, N. H.) Distribution of Ljapunov exponents in linear systems with periodic coefficients that are nearly constant in the mean. (Russian) **80f:34042**
Raisov, M. R. *See* **Šaripov, Š. R., 80i:34072**
Rozov, N. H. *See* **Rahimberdiev, M. I., 80f:34042**
Šaripov, Š. R. (*with* Raisov, M. R.) Stability of a singular point $O(0, 0)$ of a special differential system. (Russian) **80i:34072**
Selgrade, James F. Mathematical analysis of a cellular control process with positive feedback. **80g:34046**
Šestakov, A. A. (*with* Stepanov, A. N.) Index and divergence criteria for the stability of a singular point of an autonomous system of differential equations. (Russian) **80g:34047**
Spasov, N. S. Existence of invariant tori and cylinders. (Bulgarian. Russian and French summaries) **80j:34054**
Sree Hari Rao, V. Note on asymptotic equivalence for measure differential equations. **80a:34063a**
Corrigendum: "Note on asymptotic equivalence for measure differential equations" (Bull. Austral. Math. Soc. **18** (1978), no. 3, 455–460). **80a:34063b**
Stepanov, A. N. *See* **Šestakov, A. A., 80g:34047**
Vasin, V. P. A topology in the theory of linear systems of differential equations. (Russian) **80m:34048**
Vinograd, R. È. (*with* Elefteriadi, Ju. I.) Attainability of the estimate in the freezing method. (Russian) **80m:34049**
Visentin, Francesca Limiting equations and total stability. **80h:34060**
Voskresenskiĭ, E. V. Characteristic indices of a quasilinear system of differential equations. (Russian) **80e:34031**
Žukov, V. P. Method of sources for the study of stability of nonlinear systems. **80i:34073**
Žusanbaev, S. N. *See* **Nurekenov, T. K., 80a:34061**

Secondary classifications:

Andreev, A. S. Asymptotic stability of the motions of certain nonautonomous mechanical systems subject to dissipative forces. (Russian) **(80d:70027)**
Baris, Ja. S. The reduction principle for a singularly perturbed system. (Russian) **(80i:34065)**
Bronštein, I. U. (*with* Glavan, V. A.) The Grobman-Hartman theorem for extensions of dynamical systems. (Russian) **(80a:58024)**
Burgat, Christian (*with* Grujić, Ljubomir T.) Sur la stabilité asymptotique d'un système de grande dimension admettant un système agrégé du type Lotka-Volterra. (English summary) **(80f:92011)**

Caprino, Silvia (*with* Negrini, P.; Scalia, M.) Asymptotic and total stability for generalized dynamical systems. **(80d:34054)**

Chiou, Kuo Liang The geometry of indefinite J-spaces and stability behavior of linear systems. **(80b:34072)**

Dunn, J. Ernest (*with* Fosdick, Roger L.) Lemmas in thermodynamic stability: a priori constitutive inequalities and induced global bounds on thermodynamic states. **(80a:80004)**

Fosdick, Roger L. *See* **Dunn, J. Ernest, (80a:80004)**

Glavan, V. A. *See* **Bronštein, I. U., (80a:58024)**

Grujić, Ljubomir T. *See* **Burgat, Christian, (80f:92011)**

Johnson, Russell A. On a theorem of Sell. **(80g:34043)**

Karpacjuk, V. K. A family of Hill equations with common characteristic exponents. (Russian) **(80h:34048)**

Kodama, Shinzo *See* **Maeda, Hajime, (80g:34029)**

Los', G. P. The stability and asymptotic and exponential stability of a linear differential system. (Russian) **(80a:34075)**

Maeda, Hajime (*with* Kodama, Shinzo) Qualitative analysis of a class of nonlinear compartmental systems: nonoscillation and asymptotic stability. **(80g:34029)**

Negrini, P. *See* **Caprino, Silvia; et al., (80d:34054)**

Nekhoroshev, N. N. An exponential estimate of the time of stability of nearly integrable Hamiltonian systems. II. (Russian) **(80m:58017)**

Rozenvasser, E. N. Sufficient conditions for applicability of the first approximation in problems of sensitivity theory. **(80c:93039)**

Scalia, M. *See* **Caprino, Silvia; et al., (80d:34054)**

Ved', Ju. A. The influence of integral perturbations on the power asymptotic behavior of the solutions of differential equations. (Russian) **(80a:45027)**

Žukov, V. P. On the question of the source method for investigating nonlinear system stability. (Russian) **(80b:93119)**

34D10 Perturbations

Akinyele, Olusola Integral stability of differential systems and perturbation of Lyapunov functions. (Italian summary) **80d:34061**

Basti, M. On the asymptotic equivalence between two nonlinear systems. **80g:34048**

Bihari, I. Asymptotic invariant sets of autonomous differential equations. **80f:34074**

Chiou, Kuo Liang A note on the asymptotic behavior of nonlinear systems. **80g:34049**

Davis, Jon H. A multi-time scale method in almost-periodic stability problems. **80a:34064**

Furuno, Hiroshi (*with* Hara, Tadayuki) Remarks on the preservation of uniform stability from a linear system to its perturbed system. **80a:34065**

Gordon, Sheldon P. A stability theory for perturbed differential equations. **80h:34061**

Hara, Tadayuki *See* **Furuno, Hiroshi, 80a:34065**

Kosolapov, V. I. On the stability of complex systems. (Russian) **80h:34062**

Martinjuk, A. A. A theorem on the averaging principle in nonlinear mechanics. (Russian) **80a:34066**

Pachpatte, B. G. Some problems in nonlinear differential equations with integral perturbations. **80d:34062**

Ščennikov, V. N. Uniform asymptotic stability of a differential system with respect to the first nonlinear approximation of order μ. (Russian) **80a:34067**

Sree Hari Rao, V. Asymptotically self-invariant sets and stability of measure differential equations. **80a:34068**

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Broomhead, D. S. The self interaction and mutual interaction of limit cycles. The possibility of chaotic behaviour. **(80m:70022)**

Giacaglia, G. E. O. Resonance in celestial mechanics. (Portuguese) **(80e:70013)**

Gutowski, Roman *See* **Martinjuk, A. A., (80k:34070)**

Kummer, Martin On the stability of Hill's solutions of the plane restricted three body problem. **(80k:70010)**

Martinjuk, A. A. (*with* Gutowski, Roman) ★Интегральные неравенства и устойчивость движения. (Russian) [Integral inequalities and stability of motion] **(80k:34070)**

Moldabaev, S. M. Stabilization of the steady state motions of mechanical systems. (Russian. Kazakh summary) **(80c:70026)**

Nitecki, Zbigniew On the topology of the set of completely unstable flows. **(80j:58048)**

Šmeleva, I. V. The motion of Lagrange's gyroscope in a gravitational field. (Russian) **(80c:70003)**

Sobolev, V. A. (*with* Strygin, V. V.) Permissibility of changing over to precessional equations of gyroscopic systems. **(80e:70005)**

Sobolevskiĭ, E. P. An averaging principle and stability of differential equations with a small parameter. (Russian) **(80j:34081)**

Strygin, V. V. *See* **Sobolev, V. A., (80e:70005)**

Ziebur, Allen D. New directions in linear differential equations. **(80d:34011)**

Zinčenko, I. L. Reduction to normal form of a system of differential equations by means of an analytic transformation. (Russian. English summary) **(80d:34045)**

34D15 Singular perturbations

Anderson, L. R. *See* **O'Malley, R. E., Jr., 80m:34050**

Arolska, M. At. (*with* Hristova, S. G.; Bainov, D. D.) Behavior of the solutions to the Cauchy problem for nonlinear systems of differential equations that contain a parameter multiplying all the derivatives. (Russian) **80f:34043**

Bainov, D. D. *See* **Arolska, M. At.; et al., 80f:34043**

Bostanov, U. A. Stability of neutral systems in the second and third approximation. (Russian. Kazakh summary) **80k:34068**

Cronin-Scanlon, Jane Some qualitative analysis of singularly perturbed equations. **80g:34050**

Hristova, S. G. *See* **Arolska, M. At.; et al., 80f:34043**

Martinjuk, A. A. The Ljapunov-Čaplygin comparison principle for standard systems. (Russian) **80i:34075**

O'Malley, R. E., Jr. (*with* Anderson, L. R.) Singular perturbations, order reduction, and decoupling of large scale systems. **80m:34050**

Sobolev, V. A. *See* **Strygin, V. V., 80k:34069**

Strygin, V. V. (*with* Sobolev, V. A.) Reduction principles in the theory of differential equations with a manifold of stationary states. (Russian) **80k:34069**

Vekua, N. P. A system of nonlinear differential equations with a small parameter multiplying the derivatives. (Georgian. Russian summary) **80a:34069**

Vul'pe, I. M. Some properties of differential equations with solutions close to one another. (Russian) **80f:34044**

Secondary classifications:

Panfilov, N. G. *See* **Rožkov, V. I., (80a:34014)**

Rožkov, V. I. (*with* Panfilov, N. G.) A boundary value problem for a linear system with a small parameter multiplying the derivative. (Russian) **(80a:34014)**

34D20 Ljapunov stability

Allwright, D. J. (*with* Mees, Alistair I.) Lyapunov's method applied to the Hopf bifurcation. **80j:34055**

Anapol'skiĭ, L. Ju. (*with* Irtegov, V. D.; Matrosov, V. M.) Methods of constructing Ljapunov functions. (Hungarian) **80i:34076**

Anaškin, O. V. Asymptotic stability in nonlinear systems, and the critical case of $2m$ purely imaginary roots in the theory of the stability of motion. (Russian) **80b:34060**
See also **Hapaev, M. M., 80d:34063** *and* **Hapaev, M. M., 80i:34078**

Anderson, Larry R. Estimates of planar regions of asymptotic stability. **80e:34032**

Baĭksev, V. N. An algorithm for computing the homogeneous forms in the expansion of a Ljapunov function. (Russian) **80f:34045**

Bakhtina, I. M. (*with* Lerner, D. M.) Properties of Lyapunov equations with nonnegative free term matrices. **80a:34070**

Boĭčuk, O. A. *See* **Likova, O. B., 80a:34074**

Bulgakov, N. G. (*with* Kalitin, B. S.) A generalization of theorems of Ljapunov's second method. II. Examples. (Russian. English summary) **80g:34051**

Čeĭankov, B. (*with* Simeonova, D. M.) On the stability of a class of mechanical systems. (Bulgarian. Russian and English summaries) **80j:34056**

Ermolin, V. S. The existence of a positive-definite integral of a linear system with the stability of the conjugate system. (Russian) **80f:34046**

Ezello, James O. C. A further instability theorem for a certain fifth-order differential equation. **80b:34063**

Falin, A. I. Investigation of the stability of periodic and quasistatistical solutions in the "neutral" case by the averaging method. (Russian) **80c:34054**

Fal'ko, N. S. Ljapunov's second method in the problem of Poisson stability. (Russian) **80i:34077**

Gutowski, Roman *See* **Martinjuk, A. A., 80k:34070**

Hapaev, M. M. (*with* Anaĭkin, O. V.) A study of stability in systems of ordinary differential equations with almost periodic coefficients. (Russian) **80d:34063**
(*with* Anaškin, O. V.) Stability in systems of ordinary differential equations with almost periodic coefficients. (Russian) **80i:34078**

Haritonova, O. I. Construction of Ljapunov functions in m-dimensional forms. (Russian) **80f:34047**

Harrison, Gary W. Persistent sets via Lyapunov functions. **80b:34061**

Hatvani, L. Attractivity theorems for non-autonomous systems of differential equations. **80d:34064**

Hazin, L. G. (*with* Šnol', È. È.) Investigation of the asymptotic stability of equilibrium at 1:3 resonance. (Russian) **80e:34033**
Stability of the equilibrium state in some critical cases. (Russian) **80i:34079**
See also **Hazina, G. G., 80f:34048**

Hazina, G. G. (*with* Hazin, L. G.) The possibility of resonance stabilization of a system of oscillators. (Russian) **80f:34048**

Ignat'ev, A. O. (*with* Savčenko, O. Ja.; Svetličnaja, N. V.) Stability in the critical case of n pairs of purely imaginary roots. (Russian) **80j:34057**

Irtegov, V. D. *See* **Anapol'skiĭ, L. Ju.; et al., 80i:34076**

Izobov, N. A. Lower bound for the minimal exponent of a linear system. (Russian) **80d:34065**

Jančuk, L. F. Stability of the zero solution of Pfaffian systems in terms of generalized characteristic vectors. (Russian) **80a:34071**

Kalitin, B. S. On the question of homogeneous asymptotic stability. (Russian. English summary) **80h:34064**
See also **Bulgakov, N. G., 80g:34051**

Kern, Günter Zum Problem der Stabilisierung von linearen dynamischen Systemen. **80g:34052**

Knowles, Ian On stability conditions for second-order linear differential equations. **80j:34058**

Kosolapov, V. I. *See* **Martinjuk, A. A., 80j:34060**

Krečetov, G. S. The stability of a perturbed system in a critical case. (Russian) **80c:34055**

Kuraŝin, V. N. Boundedness of the solutions of a third-order differential equation with periodic coefficients. (Russian) **80b:34062**
Determination of the domain of stability of a fourth-order differential equation with periodic coefficients. (Russian) **80d:34066**

Lakshmikantham, V. (*with* Leela, S.) Cone-valued Lyapunov functions. **80a:34072**

Leela, S. *See* **Lakshmikantham, V., 80a:34072**

Leitas, A. M. The existence of the Ljapunov-Krasovskiĭ function for equations with an almost periodic quasihomogeneous right-hand side. (Russian) **80a:34073**

Lerner, D. M. *See* **Bakhtina, I. M., 80a:34070**

Likova, O. B. (*with* Boĭčuk, O. A.) Über eine Anwendung der Methode der akzelerierten Konvergenz in der Stabilitätstheorie. **80a:34074**

Los', G. P. On the stability of solutions of Hill's equation. (Russian) **80d:34067**
The stability and asymptotic and exponential stability of a linear differential system. (Russian) **80a:34075**

Martinjuk, A. A. (*with* Obolenskiĭ, A. Ju.) Investigation of the stability of autonomous comparison systems. (Russian) **80j:34059**

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(*with* Obolenskiĭ, A. Ju.) A Poincaré-Schur algorithm in stability theory. (Russian) **80c:34056**

(*with* Gutowski, Roman) ★Интегральные неравенства и устойчивость движения. (Russian) [Integral inequalities and stability of motion] **80k:34070**

See also **Mitropol'skiĭ, Ju. O., 80b:34063**

Matrosov, V. M. *See* **Anapol'skiĭ, L. Ju.; et al., 80i:34076**

Mees, Alistair I. *See* **Allwright, D. J., 80j:34055**

Merenkov, Ju. N. *See* **Šestakov, A. A., 80c:34034** *and* **Šestakov, A. A., 80j:34062**

Mitropol'skiĭ, Ju. O. (*with* Martinjuk, A. A.) Some questions on the comparison method in nonlinear mechanics. (Russian) **80b:34063**

Monakov, V. N. A reduction principle in stability theory for some nonautonomous nonlinear systems. (Russian. English summary) **80c:34057**

Müller, Peter C. ★Stabilität und Matrizen. **80d:34068**

Neuere Beiträge zur Ljapunovschen Stabilitätstheorie. **80j:34061**

Nakajima, F. A stability criterion of diagonal dominance type. **80c:34058**

Obolenskiĭ, A. Ju. *See* **Martinjuk, A. A., 80c:34056** *and* **Martinjuk, A. A., 80j:34059**

Pérez, Hernando Stability theory—stability following Ljapunov's second method. (Spanish) **80g:34053**

Peterson, William C. Generalized Liapunov functions. **80a:34076**

Radziszewski, Bogusław Investigation of the stability of motion on the basis of the "best" Ljapunov function. (Polish) **80i:34080**

Salvadori, Luigi The use of two indices in the stability problem. (Italian) **80a:34077**

Sansone, G. The Minorsky stroboscopic method applied to the Mathieu-Van der Pol oscillator. (Russian summary) **80c:34059**

Savčenko, O. Ja. *See* **Ignat'ev, A. O.; et al., 80j:34057**

Seibert, Peter Some recent developments in stability of general systems. **80i:34081**

Šestakov, A. A. (*with* Merenkov, Ju. N.) Examples of Ljapunov unstable points of positive attraction. (Russian) **80e:34034**

(*with* Merenkov, Ju. N.) Ljapunov stability and attracting sets relative to a nonautonomous differential system. (Russian) **80j:34062**

Simeonova, D. M. On the stability of the zero solution of a system of two nonlinearly coupled harmonic oscillators. (Bulgarian. Russian and English summaries) **80j:34063**

On the stability of the zero solution of a class of nonlinear autonomous systems. (Bulgarian. Russian and English summaries) **80j:34064**

See also **Češankov, B., 80j:34056**

Snevčeliev, H. P. An application of Frommer's method in the theory of the stability of strongly nonlinear systems of differential equations. (Bulgarian. Russian and English summaries) **80d:34069**

Šnol', Ė. Ė. *See* **Hazin, L. G., 80e:34033**

Svetličnaja, N. V. *See* **Ignat'ev, A. O.; et al., 80j:34057**

Vikina, V. V. Stability of the zero solution of differential equations with discontinuous right-hand sides. (Russian) **80d:34070**

Vũ Trọng Tuân Some theorems on the stability of degree n with respect to the matrix $\Phi(t)$. (Russian) **80b:34064**

Zubov, S. V. A system with hysteresis. (Russian) **80d:34071**

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Barbašin, E. A. ★Метод сечений в теории динамических систем. (Russian) [Method of sections in the theory of dynamical systems] **(80i:34067)**

Brayton, Robert K. (*with* Tong, Christopher H.) Stability of dynamical systems: a constructive approach. **(80d:93053)**

Brown, R. Leonard Stability of sequences generated by nonlinear differential systems. **(80f:65092)**

Bulsara, Adi R. (*with* Schieve, William C.) Entropy and stability in a stochastic laser model. **(80b:82002)**

Diamond, Phil Discrete Liapunov functions with $\Delta^2 V > 0$. **(80d:39001)**

Fawzy, I. A simplified stability criterion for nonconservative systems. **(80d:70024)**

Fox, Ronald Forrest Irreversible processes at nonequilibrium steady states. **(80d:80023)**

Gelig, A. H. (*with* Leonov, G. A.; Jakubovič, V. A.) ★Устойчивость нелинейных систем с неединственным состоянием равновесия. (Russian) [The stability of nonlinear systems with a nonunique equilibrium state] **(80g:93061)**

Gutowski, Roman An introduction to the stability of motion of continua. (Polish) **(80g:73026)**

Mathematical models of dynamical processes, and the stability of motion. (Polish) **(80d:93057)**

Hapaev, M. M. The averaging and investigation of stability in multifrequency systems of ordinary differential equations. (Russian) **(80b:34049)**

Jakubovič, V. A. *See* **Gelig, A. H.; et al., (80g:93061)**

Kosolapov, V. I. *See* **Martinjuk, A. A., (80e:93097)**

Leitmann, George Guaranteed asymptotic stability for a class of uncertain linear dynamical systems. **(80i:93032)**

Leonov, G. A. *See* **Gelig, A. H.; et al., (80g:93061)**

Levitan, B. M. (*with* Žikov, V. V.) ★Почти-периодические функции и дифференциальные уравнения. (Russian) [Almost-periodic functions and differential equations] **(80d:42010)**

Malyšev, Ju. V. Stability and topological classification of invariant sets. (Russian) **(80f:58024)**

Martinjuk, A. A. Technical stabilization of controlled motions. (Russian) **(80c:93102)**

(*with* Kosolapov, V. I.) The stability of mechanical systems in a variable communications model. (Russian) **(80e:93097)**

Mil'štein, G. N. Stability and stabilization of periodic motions of autonomous systems. **(80m:70025)**

Piljugin, S. Ju. Phase diagrams of Morse-Smale systems without critical connections. (Russian. English summary) **(80d:58037)**

Ramm, A. G. Existence in the large of solutions to simultaneous differential equations. (Russian summary) **(80c:34005)**

Samovol, V. S. The equivalence of systems of differential equations with reducing contraction. (Russian) **(80g:34037)**

Schieve, William C. *See* **Bulsara, Adi R., (80b:82002)**

Somolinos, Alfredo S. Stability of Lur'e-type non-linear equations. **(80b:93127)**

Tong, Christopher H. *See* **Brayton, Robert K., (80d:93053)**

Trzepizur, A. Stability and Lyapunov functions in generalized local pseudodynamical systems. **(80e:54054)**

Walker, J. A. Some results on Liapunov functions and generated dynamical systems. **(80c:34046)**

Žikov, V. V. *See* **Levitan, B. M., (80d:42010)**

Zubov, S. V. The stability of periodic motion. (Russian) **(80f:54037)**

Zubova, A. F. Investigation of oscillations and stability. (Russian) **(80k:34046)**

Žukov, V. P. Method of qualitative stability analysis of nonlinear systems. **(80a:93131)**

34D25 Popov-type stability

Biljagoz, Z. U. (*with* Leonov, G. A.) Stability of a dynamical system with a cylindrical phase space. (Russian) **80a:34078**

Leonov, G. A. *See* **Biljagoz, Z. U., 80a:34078**

Maigarin, B. Ž. (*with* Žumatov, S. S.) Absolute stability, an estimate of the indices of the transient process of a programming manifold of controllable systems. (Russian. Kazakh summary) **80i:34082**

Žumatov, S. S. *See* **Maigarin, B. Ž., 80i:34082**

Secondary classifications:

Barkin, A. I. Estimates for the variables of absolutely stable systems. **(80j:93092)**

Popov, V. M. Monotonicity and mutability. **(80m:34036)**

34D30 Structural stability and analogous concepts [See also 58Fxx.]

Osipenko, G. S. The behavior of the solutions of differential equations near invariant manifolds. (Russian) **80h:34065**

Palmer, Kenneth J. The structurally stable linear systems on the half-line are those with exponential dichotomies. **80j:34065**

Rosen, Robert A comment on structural stability. **80m:34051**

Vandewiele, M. E. L. Sur une équation de Mathieu avec amortissement non linéaire. **80j:34066**

Secondary classifications:

Antonov, V. A. (*with* Sažin, A. I.; Sokolov, L. L.; Holševnikov, K. V.) On the instability of Hamiltonian systems. **(80d:58022)**

Bronštein, I. U. (*with* Glavan, V. A.) Hyperbolic sets of smooth extensions of dynamical systems. (Russian) **(80k:58081)**

Bylov, B. F. (*with* Vinograd, R. È.; Lin, V. Ja.; Lokucievskiĭ, O. V.) Topological causes of the anomalous behavior of some almost periodic systems. (Russian) **(80d:58034)**

Čerkas, L. A. The degree of structural instability of the focus in the Liénard equation. (Russian. English summary) **(80i:34039)**

Dai, Lo Sheng On the existence, uniqueness, and global asymptotic stability of the periodic solution of the modified Michaelis Menten mechanism. **(80c:34039)**

Glavan, V. A. *See* **Bronštein, I. U., (80k:58081)**

Holševnikov, K. V. *See* **Antonov, V. A.; et al., (80d:58022)**

Lin, V. Ja. *See* **Bylov, B. F.; et al., (80d:58034)**

Lokucievskiĭ, O. V. *See* **Bylov, B. F.; et al., (80d:58034)**

Lopes, Artur Oscar Structural stability and hyperbolic attractors. **(80j:58046)**

Palis, Jacob Dynamical systems. (Portuguese) **(80d:58036)**

Piljugin, S. Ju. Simple connectedness with preservation of the phase diagram. (Russian) **(80h:58036)**

Pjartli, A. S. Cycles of a system of two complex differential equations in the vicinity of a stationary point. (Russian) **(80g:34005)**

Reyn, J. W. A stability criterion for separatrix polygons in the phase plane. **(80f:34041)**

Robinson, R. Clark Introduction to the closing lemma. **(80d:58061)**

Sažin, A. I. *See* **Antonov, V. A.; et al., (80d:58022)**

Sokolov, L. L. *See* **Antonov, V. A.; et al., (80d:58022)**

Takens, Floris Global phenomena in bifurcations of dynamical systems with simple recurrence. **(80f:58034)**

Vinograd, R. È. *See* **Bylov, B. F.; et al., (80d:58034)**

34D40 Ultimate boundedness

34D99 None of the above, but in this section

Barnes, Earl R. Stability conditions for second-order ordinary differential equations with periodic coefficients. **80h:34066**

Caprino, Silvia (*with* Gigliotti, Assunta) A structural property in the theory of stability in terms of two measures. **80m:34052**

Deo, S. G. *See* **Pandit, S. G., 80j:34067**

Gigliotti, Assunta *See* **Caprino, Silvia, 80m:34052**

Pandit, S. G. (*with* Deo, S. G.) Stability and asymptotic equivalence of measure differential equations. **80j:34067**

Rahimberdiev, M. I. The relation of systems with exact mean value of the trace of the matrices to regular systems. (Russian) **80b:34065**

Rao, Vadrevu Sree Hari Note on conditionally asymptotically invariant sets. **80g:34054**

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Baumgarte, Joachim A further remark to: "Another regularization to the Kepler problem" (Celestial Mech. 15 (1977), no. 1, 131) by J. Stickforth. **(80c:70012)**
Belikov, S. A. The stability of uniform rotations of a rigid body around the main axis in a Newtonian force field. (Russian. English summary) **(80a:70005)**
Bernussou, J. *See* **Burgat, Christian, (80a:93121)**
Bickart, Theodore A. (*with* Jury, E. I.) Real polynomials: nonnegativity and positivity. **(80a:93069)**
Burganskaja, L. I. Necessary conditions of stability in the large of some nonlinear systems. (Russian. English summary) **(80a:93120)**
Burgat, Christian (*with* Bernussou, J.) On the stability of interconnected systems with periodic structural perturbations. **(80a:93121)**
Dall'Aglio Angelotti, Anita An observation on the concept of strong stability. (Italian. English summary) **(80h:34054)**
Eršov, L. V. (*with* Zel'dič, E. I.) Investigation of the stability of equilibrium of three-dimensional deformable bodies. (Russian) **(80c:73040)**
Golubev, V. G. On lower bounds for the distance between bodies in the unrestricted three-body problem. **(80c:70007)**
Hussain, Munawar Generalised Chaplygin's equations and their integration. **(80b:70023)**
Jury, E. I. *See* **Bickart, Theodore A., (80a:93069)**
Kunicyn, A. L. (*with* Perežogin, A. A.) On the stability of triangular libration points of the photogravitational restricted circular three-body problem. **(80a:70025)**
Montgomery, John T. On the homotopy index of Conley. **(80e:58031)**
Percival, Ian C. Stochastic metastability and Hamiltonian dynamics. **(80e:58022)**
Perežogin, A. A. *See* **Kunicyn, A. L., (80a:70025)**
Piljugina, V. B. Behavior of trajectories on the center manifold of a system with one zero root. (Russian) **(80k:58069)**
Rechester, Alexander B. (*with* Stix, Thomas H.) Stochastic instability of a nonlinear oscillator. **(80b:70033)**
Rotgauz, B. A. Generalization of a stability theorem to the motion of nonconservative systems. (Russian) **(80b:70030)**
Samsonov, V. A. On the quasi-steady-state motions of mechanical systems. **(80e:70017)**
Shieh, Leang S. (*with* Shih, Chao D.; Yates, R. E.) Some sufficient and some necessary conditions for the stability of multivariable systems. **(80e:93100)**
Shih, Chao D. *See* **Shieh, Leang S.; et al., (80e:93100)**
(Stickforth, J.) *See* **Baumgarte, Joachim, (80c:70012)**
Stix, Thomas H. *See* **Rechester, Alexander B., (80b:70033)**
Yates, R. E. *See* **Shieh, Leang S.; et al., (80e:93100)**
Zel'dič, E. I. *See* **Eršov, L. V., (80c:73040)**
Žukov, V. P. A method of investigating the stability of nonlinear systems. (Russian) **(80a:93132)**

34Exx Asymptotic theory

Goering, Herbert ★Asymptotische Methoden zur Lösung von Differentialgleichungen. **80c:34060**

Secondary classifications:

Bender, Carl M. (*with* Orszag, Steven A.) ★Advanced mathematical methods for scientists and engineers. **(80d:00030)**
Orszag, Steven A. *See* **Bender, Carl M., (80d:00030)**

34E05 Asymptotic expansions

Agzamhodžaev, I. (*with* Aripov, M. M.) On the asymptotic behavior of the solutions of a second-order linear differential equation. (Russian) **80i:34083**
Amilahanova, N. T. Asymptotic integration of an oscillation equation in the resonance case. (Russian) **80i:34084**
Aripov, M. M. *See* **Agzamhodžaev, I., 80i:34083**
Day, William B. Exponential asymptotic expansions for nonlinear differential equations. **80f:34049**
Dragieva, N. A. Solution of a quasilinear system with two degrees of freedom. (Bulgarian. Russian and English summaries) **80d:34072**
Feščenko, S. F. (*with* Sotničenko, M. A.) Asymptotic solution for an infinite system of differential equations. (Russian) **80b:34066**
Gilbert, Richard C. Asymptotic formulas for solutions of a singular linear ordinary differential equation. **80j:34068**
Grasman, J. (*with* Jansen, M. J. W.; Veling, E. J. M.) Asymptotic methods for relaxation oscillations. **80m:34053**
Hodžaev, K. Š. *See* **Reimers, N. A., 80b:34067**
Hsieh, Po Fang On asymptotic integrations of $x^2y'' - P(x)y = 0$. **80a:34079**
Jansen, M. J. W. *See* **Grasman, J.; et al., 80m:34053**
Judina, A. S. Regularization method for equations with a regular singular point. (Russian) **80i:34085**
Meĭliev, T. K. *See* **Škil', M. I., 80j:34069**
Paris, R. B. (*with* Wood, A. D.) The asymptotic expansion of solutions of the differential equation $u^{iv} + \lambda^2[(z^2 + c)u'' + azu' + bu] = 0$ for large $|z|$. **80k:34071**
Reimers, N. A. (*with* Hodžaev, K. Š.) Averaging of quasilinear systems with several fast variables. (Russian) **80b:34067**
Ryžih, A. D. Asymptotic solution of a linear differential equation with rapidly oscillating coefficient. (Russian) **80h:34068**
Šariphodžaeva, Z. The asymptotic solution of a boundary value problem for a second-order differential equation with a small parameter. (Russian) **80d:34073**
Škil', M. I. (*with* Meĭliev, T. K.) Asymptotic representation of solutions of a system of second-order linear differential equations with small parameter of fractional rank multiplying the derivative. (Russian. English summary) **80j:34069**
Sotničenko, M. A. *See* **Feščenko, S. F., 80b:34066**
Veling, E. J. M. *See* **Grasman, J.; et al., 80m:34053**
Wood, A. D. *See* **Paris, R. B., 80k:34071**
Zlbolen, È. Regularized asymptotic solutions of singularly perturbed problems in the case of a matrix of simple structure and general form. (Russian) **80i:34086**
Žukova, G. S. Asymptotic representation of the solutions of differential equations with a large parameter. (Russian) **80h:34067**

Secondary classifications:

Aĭković, R. *See* **Jovanović, J.; et al., (80h:76030)**
Crothers, D. S. F. Comment on: "Asymptotic expansions for parabolic cylinder functions" (J. Phys. B 11 (1978), no. 18, L531–L533) by C. Lozano and F. W. J. Olver. **(80g:33008)**
Đurić, M. *See* **Jovanović, J.; et al., (80h:76030)**
Falerman, M. Distribution of eigenvalues of a two-parameter system of differential equations. **(80b:34018)**
Ford, G. W. (*with* Lewis, J. T.; McConnell, James) Rotational Brownian motion of an asymmetric top. **(80b:82003)**
Gingold, H. On continuous triangularization of matrix functions. **(80g:15023)**
Grigor'eva, N. S. Asymptotic representations of modified wave functions of an oblate spheroid. (Russian) **(80i:34090)**
Haberman, Richard Slowly varying jump and transition phenomena associated with algebraic bifurcation problems. **(80f:34035)**
Jovanović, J. (*with* Aĭković, R.; Đurić, M.) Approximations supérieures dans la théorie de la couche limite nonstationnaire et leur traitement paramétrique. **(80h:76030)**
Kelly, Brian J. Admissible domains for higher order differential equations. **(80h:34005)**
Kohmoto, Tomonori *See* **Kohno, Mitsuhiko; et al., (80j:34071)**
Kohno, Mitsuhiko An extended Airy function of the first kind. **(80h:33023)**
A two point connection problem. **(80i:34006)**
(*with* Ohkohchi, Shigemi; Kohmoto, Tomonori) On full uniform simplification of even-order linear differential equations with a parameter. **(80j:34071)**
Lewis, J. T. *See* **Ford, G. W.; et al., (80b:82003)**
Lozano, C. (*with* Olver, F.) Asymptotic approximations for parabolic cylinder functions. **(80g:33007)**
See also **Crothers, D. S. F., (80g:33008)**
Luk'janov, L. G. On the plane form and symmetry of asymptotic solutions in the restricted three-body problem. **(80a:70018)**
McConnell, James *See* **Ford, G. W.; et al., (80b:82003)**
Novoselov, V. S. Asymptotic theory of a magnetic damper. **(80g:70009)**
Ohkohchi, Shigemi *See* **Kohno, Mitsuhiko; et al., (80j:34071)**
Olver, F. *See* **Lozano, C., (80g:33007)** *and* **Crothers, D. S. F., (80g:33008)**
Skripnik, A. I. Problem-oriented software for asymptotic methods of nonlinear mechanics. (Russian. English summary) **(80e:70030)**
Trąęsowski, A. The asymptotic motion of the concentrated defect. (Polish and Russian summaries) **(80i:73063)**
Wyrwich, Herbert Eine lineare Approximation der zentralen Anfangswerte gewisser gewöhnlicher Differentialgleichungen im überkritischen Fall. **(80g:34006)**
Žukova, G. S. Sufficient conditions for the solvability of a linear differential equation with a large parameter in the case of a multiple root of a characteristic equation. (Russian) **(80b:34006)**

34E10 Perturbations

Collinge, I. R. (*with* Ockendon, J. R.) Transition through resonance of a Duffing oscillator. **80i:34087**
Dellwo, David R. (*with* Friedman, Morton B.) Uniform asymptotic solutions for a differential equation with an almost periodic coefficient. **80b:34068**
Friedman, Morton B. *See* **Dellwo, David R., 80b:34068**
Ockendon, J. R. *See* **Collinge, I. R., 80i:34087**
Rosen, Bernard Operator method for the perturbative solution of ordinary differential equations. **80h:34069**
Safonov, V. F. Asymptotic solution of a singularly perturbed nonlinear problem with a zero point of the spectrum of the limit operator. (Russian) **80i:34088**

Secondary classifications:

Baran, S. A. Multipole expansions in strong-gravity theory. (Italian and Russian summaries) **(80f:83041)**
Bender, Carl M. Perturbation theory in large order. **(80d:81023)**
Berkey, Dennis D. (*with* Freedman, Marvin I.) Buckled elastica at contact: a perturbation analysis. **(80g:73041)**
Brumberg, V. A. Perturbation theory in rectangular coordinates. **(80a:70012)**
Freedman, Marvin I. *See* **Berkey, Dennis D., (80g:73041)**
Howland, Robert A., Jr. A note on the application of the von Zeipel method to degenerate Hamiltonians. **(80d:70033)**
de Jager, Eduard M. (*with* Küpper, Tassilo) The Schrödinger equation as a singular perturbation problem. **(80j:34025)**
Küpper, Tassilo *See* **de Jager, Eduard M., (80j:34025)**
Ling, Rina Multiple scale perturbation for second-order nonlinear differential equations. (French and German summaries) **(80f:34006)**
Shimizu, T. Analytic form of the simplest limit cycle in the Lorenz model. **(80j:58054)**

34E15 Singular perturbations, general theory

Arolska, M. At. (*with* Baĭnov, D. D.) The behavior of the solutions of the Cauchy problem for nonlinear systems of differential equations containing a parameter multiplying all derivatives. (Russian) **80k:34072**
Baĭnov, D. D. *See* **Arolska, M. At., 80k:34072**
Butuzov, V. F. *See* **Vasil'eva, A. B., 80b:34070**
Campbell, Stephen L. (*with* Rose, Nicholas J.) Singular perturbation of autonomous linear systems. III. **80i:34089c**
Singular perturbation of autonomous linear systems. II. **80i:34089b**

(*with* Rose, Nicholas J.) Singular perturbation of autonomous linear systems. **80f:34089a**

Dmitriev, M. G. *See* **Glizer, V. Ja.,** **80k:34073**

Glizer, V. Ja. (*with* Dmitriev, M. G.) Singular perturbations and generalized functions. (Russian) **80k:34073**

van Harten, A. Singular perturbations for nonlinear second-order ODE with nonlinear b.c. of Neumann or mixed type. **80f:34050**

Hasanov, A. A. The asymptotics of a solution to a two-parameter, singularly perturbed problem in a critical case. (Russian) **80k:34074**

Hirasawa, Yoshikazu On a singular perturbation problem for linear systems of ordinary differential equations. II. **80e:34035**

Howes, Frederick A. An asymptotic theory for a class of nonlinear Robin problems. **80a:34080**

Singularly perturbed nonlinear Robin problems. **80g:34055**

An improved boundary layer estimate for a singularly perturbed initial value problem. **80b:34069**

Karimov, S. Asymptotic behavior of the solutions of a class of differential equations with a small parameter multiplying the derivatives. (Russian) **80h:34070**

Kelley, Walter G. A nonlinear singular perturbation problem for second-order systems. **80b:34071**

MacGillivray, A. D. The existence of an overlap domain for a singular perturbation problem. **80d:34074**

Mlščenko, E. F. The asymptotics of relaxation oscillations. (Russian) **80d:34075**

O'Malley, R. E., Jr. On singular singularly-perturbed initial value problems. **80d:34076**

Reinhardt, H.-J. Stability and convergence for singular perturbations and boundary layer problems. **80a:34081**

Rose, Nicholas J. *See* **Campbell, Stephen L., 80f:34089a** *and* **Campbell, Stephen L., 80f:34089c**

Safonov, V. F. A regularization method for singularly perturbed systems of nonlinear differential equations. (Russian) **80h:34072**

Šiškin, A. A. Asymptotic behavior of the solution of a singular nonlinear system of ordinary differential equations. (Russian) **80g:34056**

Skripnik, V. P. On small factors multiplying the derivatives. (Russian. Kazakh summary) **80a:34082**

Sobolev, V. A. Investigation of differential equations with small parameters multiplying derivatives by the method of integral manifolds. (Russian) **80k:34075**

Vasil'eva, A. B. The development of the small parameter method. (Russian) **80g:34057**

(*with* Butuzov, V. F.) ★Сингулярно возмущенные уравнения в критических случаях. (Russian) [Singularly perturbed equations in critical cases] **80b:34070**

Secondary classifications:

Beljanin, M. P. A system of integro-differential equations with a small parameter multiplying the derivative of conditionally stable type. (Russian) **80a:45023**

Blankenship, G. (*with* Sachs, S.) Singularly perturbed linear stochastic ordinary differential equations. **80g:60058**

Ějova, L. A. Asymptotic expansion of the solution of a singularly perturbed system. (Russian) **80l:70003**

Grabmüller, Hans ★Singular perturbation techniques applied to integro-differential equations. **80k:45015**

Habets, Patrick On relaxation oscillations in a forced van der Pol oscillator. **80b:34038**

Howes, Frederick A. Singularly perturbed superquadratic boundary value problems. **80f:34017**

Liu, Bao Ping The integral equation method in the nonlinear vibrations of systems with several degrees of freedom. (Chinese) **80d:70046**

Martins, Roberto Vieira Some aspects of resonance problems of celestial mechanics. (Portuguese) **80e:70016**

Mika, Janusz Asymptotic methods for singularly perturbed linear differential equations in Banach spaces. **80l:34105**

Nipp, K. A formal method for matched asymptotic expansions applied to the Field-Noyes model of the Belousov-Zhabotinskii reaction. **80e:80012**

Plotkin, Ja. D. (*with* Turbin, A. F.) Decomposition of singularly perturbed analytic semigroups of operators. (Russian) **80l:47058**

Sachs, S. *See* **Blankenship, G., 80g:60058**

Sarlet, Willy Asymptotic convergence of averaging methods. **80j:34052**

Turbin, A. F. *See* **Plotkin, Ja. D., 80l:47058**

34E20 Singular perturbations, turning point theory, WKB-methods

Averkov, S. I. Variation of amplitude and phase oscillations in systems with variable parameters. (Russian. English summary) **80f:34052**

Baldwin, P. Uniform approximations to solutions of a linear second-order differential equation outside a vanishingly small region containing two asymptotically coincident transition points. **80j:34070**

Fröman, Nanny (*with* Fröman, Per Olof) On the theory of vibration-rotation interaction. **80d:34077**

Fröman, Per Olof *See* **Fröman, Nanny, 80d:34077**

Fulling, Stephen A. Adiabatic expansions of solutions of coupled second-order linear differential equations. II. **80e:34036**

Grigor'eva, N. S. Asymptotic representations of modified wave functions of an oblate spheroid. (Russian) **80l:34090**

de Groen, P. P. N. The nature of resonance in a singular perturbation problem of turning point type. **80m:34054**

Hayashi, Kiyoshi The boundary layer equation $x''' + 2xx'' + 2\lambda(1 - x'^2) = 0$. **80l:34091**

Hinton, F. L. Stokes multipliers for a class of ordinary differential equations. **80m:34055**

Kohmoto, Tomonori *See* **Kohno, Mitsuhiko; et al., 80j:34071**

Kohno, Mitsuhiko (*with* Ohkohchi, Shigemi; Kohmoto, Tomonori) On full uniform simplification of even-order linear differential equations with a parameter. **80j:34071**

Nakano, Minoru Second-order linear ordinary differential equations with turning points and singularities. II. **80f:34051**

Nishimoto, Toshihiko On the Orr-Sommerfeld type equations. II. Connection formulas. **80d:34078**

Ohkohchi, Shigemi *See* **Kohno, Mitsuhiko; et al., 80j:34071**

Olver, F. General connection formulae for Liouville-Green approximations in the complex plane. **80a:34083**

Roos, H.-G. Die Konstruktion asymptotischer Fundamentalsysteme für lineare Differentialgleichungen mit Wendepunkten. **80e:34037**

Die asymptotische Lösung einer linearen Differentialgleichung mit dreisegmentigem charakteristischen Polygon. **80g:34058**

Sotničenko, M. A. Simplification of the turning point problem for a system of linear differential equations. (Russian. English summary) **80a:34084**

Zeman, Jiří Eine Bemerkung zur WKB-Methode. (Czech and Russian summaries) **80m:34056**

Secondary classifications:

Barancev, R. G. (*with* Èngel'gardt, V. N.) Asymptotic behavior of integrals of Airy functions with a power weight. (Russian) **80j:33013**

Braun, P. A. WKB-approximation for three-term recurrence relations and quasi-energies of an anharmonic oscillator. (Russian. English summary) **80b:81020**

Èngel'gardt, V. N. *See* **Barancev, R. G., 80j:33013**

Fröman, Nanny (*with* Thylwe, Karl-Erik) Settling the question of the high-energy behavior of phase shifts produced by repulsive, strongly singular, inverse-power potentials. **80g:81063**

Heading, John Generalized approximate methods for transmission through a barrier governed by a differential equation of order $2n$. **80e:81035**

Korsch, H. J. Semiclassical densities in phase space: Wigner's distribution function for thermodynamic equilibrium. **80k:81054**

Lee, Shyh Yuan (*with* Takigawa, N.) A wave propagation matrix method in semiclassical theory. **80c:81109**

Seminara, Giovanni On Rayleigh's criterion for slowly varying flows. **80e:76021**

Shipsey, Edward J. Approximation method for molecular collisions in the turning point region. **80f:82014**

Suškova, T. A. Construction of an approximate solution of a second-order linear differential equation in the neighborhood of a multiple turning point. (Russian) **80j:34015**

Takigawa, N. *See* **Lee, Shyh Yuan, 80c:81109**

Thylwe, Karl-Erik *See* **Fröman, Nanny, 80g:81063**

Wasow, Wolfgang The magnitude of an adiabatic invariant of quantum mechanics. **80h:81015**

34E99 None of the above, but in this section

Secondary classifications:

Carpenter, Gail A. Bursting phenomena in excitable membranes. **80b:92007**

Comins, N. (*with* Schutz, Bernard F.) On the ergoregion instability. **80b:85004**

Junghanns, Peter (*with* Meyer, Sybille) Eine asymptotische Zerlegung der Lösung einer schwach nichtlinearen Randwertaufgabe vierter Ordnung mit einem kleinen Parameter bei der höchsten Ableitung. **80j:34019**

Lakin, W. D. Effect of a small tip mass on the vibrations of a rapidly rotating flexible rod. **80a:73025**

Meyer, Sybille *See* **Junghanns, Peter, 80j:34019**

Schutz, Bernard F. *See* **Comins, N., 80b:85004**

34F05 Equations and systems with randomness [See also 60H10, 93Exx.]

Cikailo, T.-N. M. *See* **Kolomiec', V. G., 80m:34057**

Kistner, A. Strenge Beziehungen für die Momente linearer Systeme mit zufälliger Parametererregung. **80l:34092**

Kolomiec', V. G. (*with* Cikailo, T.-N. M.) An oscillatory process in a strongly nonlinear stochastic system. (Russian. English summary) **80m:34057**

Kurss, H. (*with* Vojir, W.) A resonant response to random excitation. **80k:34076**

Ladde, G. S. Stability technique and thought provocative dynamical systems. II. **80k:34077**

Maravall Casesnoves, Dario The integration of systems of linear differential equations with random initial values. (Spanish. Romanian summary) **80c:34061**

Differential equations and linear integral equations with random initial conditions. (Spanish) **80l:34093**

Pugačev, V. S. Estimation of state and of parameters of continuous nonlinear systems. **80m:34058**

Vojir, W. *See* **Kurss, H., 80k:34076**

Zubov, V. I. Differential equations of probability distributions. (Russian) **80e:34038**

Secondary classifications:

Arlaratnam, S. T. (*with* Tam, D. S. F.) Random vibration and stability of a linear parametrically excited oscillator. (German and Russian summaries) **80b:70031**

Benes, V. E. Realizing a weak solution on a probability space. **80j:60090**

Bover, D. C. C. Moment equation methods for nonlinear stochastic systems. **80b:93174**

Chang, Mou Hsiung Optimal control for stochastic functional differential equations. **80m:49023**

Da Prato, Giuseppe (*with* Iannelli, Mimmo; Tubaro, Luciano) Dissipative functions and finite-dimensional stochastic differential equations. **80c:60075**

Dubko, V. A. The first integral of a system of stochastic differential equations. (Russian) **80b:60081**

Geman, Stuart Some averaging and stability results for random differential equations. **80g:60059**

Holloway, Greg Order and disorder in nonlinear fluid motions. **80f:76020**

Iannelli, Mimmo *See* **Da Prato, Giuseppe; et al., (80c:60075)**

Ichikawa, Akira Dynamic programming approach to stochastic evolution equations. **(80b:93164)**

Jusupov, A. K. Resonance in stochastic systems. (Russian) **(80d:70047)**

Krasnosel'skiĭ, M. A. (*with* Pokrovskiĭ, A. V.) Natural solutions of stochastic differential equations. (Russian) **(80a:60079)**

Larisch, Ernest Steady states of weakly dissipative systems. **(80a:82007)**

Mangel, Marc Small fluctuations in systems with multiple steady states. **(80c:80012)**

Novikov, E. A. (*with* Sedov, Ju. B.) Stochastic properties of a four-vortex system. **(80g:76026)**

Pokrovskiĭ, A. V. *See* **Krasnosel'skiĭ, M. A., (80a:60079)**

Purkert, Walter (*with* vom Scheidt, Jürgen) Randwertprobleme mit schwach korrelierten Prozessen als Koeffizienten. (English summary) **(80f:60051)**

(*with* vom Scheidt, Jürgen) Stochastic eigenvalue problems for differential equations. **(80m:60071)**

vom Scheidt, Jürgen *See* **Purkert, Walter, (80f:60051)** *and* **Purkert, Walter, (80m:60071)**

Sedov, Ju. B. *See* **Novikov, E. A., (80g:76026)**

Tam, D. S. F. *See* **Ariaratnam, S. T., (80b:70031)**

Tubaro, Luciano *See* **Da Prato, Giuseppe; et al., (80c:60075)**

Vardazarjan, V. N. Density states in homogeneous Dirac systems with model random potentials. (Russian. Armenian summary) **(80h:60082)**

34Gxx Differential equations in abstract spaces [See also 58D25.]

Sova, Miroslav Abstract Cauchy problem. **80f:34053**

Secondary classifications:

Travis, C. C. (*with* Webb, G. F.) An abstract second-order semilinear Volterra integro-differential equation. **(80c:45018)**

Webb, G. F. *See* **Travis, C. C., (80c:45018)**

34G10 Linear equations [See also 47Axx, 47Bxx, 47D05.]

Aliev, A. B. (*with* Perov, A. I.) Almost periodic solutions of second-order differential equations in a Banach space. (Russian) **80e:34039**

Aliev, F. A. The convergence and rate of convergence of the Galerkin method for first order equations. (Russian. Azerbaijani and English summaries) **80a:34085**

Stability of the Bubnov-Galerkin method for first-order equations. (Russian. Armenian and English summaries) **80g:34060**

Arminjon, Paul Solutions presque périodiques d'une équation différentielle opérationnelle. **80d:34079**

Aslanov, G. I. Asymptotic behavior of the weighted trace for a higher order operator equation. (Russian. Azerbaijani and English summaries) **80c:34063**

Baskakov, A. G. *See* **Korpaev, K., 80e:34041**

Bloom, Frederick Remarks on the asymptotic behavior of solutions to damped evolution equations in Hilbert space. **80f:34054**

Borok, V. M. (*with* Žitomirs'kiĭ, Ja. Ĭ.) Holmgren's principle in the abstract Cauchy problem for loaded equations. (Russian. English summary) **80k:34071**

Carroll, Robert Wayne Systems of abstract differential equations in general spaces. **80c:34064**

Chiou, Kuo Liang The geometry of indefinite J-spaces and stability behavior of linear systems. **80b:34072**

Derguzov, V. I. The uniqueness of the solution of a special class of differential equations with periodic coefficients. (Russian. English summary) **80f:34055**

Domšlak, Ju. I. A Sturm-type comparison theorem for a first-order equation in Hilbert space with a cone and its applications to systems of ordinary differential equations. (Russian. Azerbaijani and English summaries) **80k:34078**

Dorroh, J. R. A linear evolution equation without a common dense core for the generators. **80k:34079**

Goldstein, Jerome A. Convexity, boundedness, and almost periodicity for differential equations in Hilbert space. **80e:34040**

Gorbačuk, M. L. *See* **Gorbačuk, V. Ĭ., 80j:34072**

Gorbačuk, V. Ĭ. (*with* Gorbačuk, M. L.) The Dirichlet problem for an operator Sturm-Louiville equation. (Russian) **80j:34072**

Ishii, Susumu An approach to linear hyperbolic evolution equations by the Yosida approximation method. **80b:34073**

Jurčuk, N. I. The method of energy inequalities in the investigation of some degenerate linear operator-differential equations. (Russian) **80d:34080**

Kartsatos, Athanassios G. (*with* Walters, T.) Origins of oscillation criteria of operator differential equations in Hilbert space. **80b:34074**

Kiĭlevskiĭ, G. É. On entire operator-valued functions of exponential type. (Russian) **80g:34061**

Kolesov, Ju. S. Stability of solutions of linear differential equations of parabolic type with almost periodic coefficients. (Russian) **80g:34059**

Korpaev, K. (*with* Baskakov, A. G.) Spectral conditions of nearly automorphic bounded solutions of abstract differential equations. (Russian. Turkmen and English summaries) **80e:34041**

Lascar, Bernard Théorème de Cauchy-Kovalevsky et théorème d'unicité d'Holmgren pour des fonctions analytiques d'une infinité de variables. **80g:34062**

Ljaško, S. I. A method of finding the approximate solution to the Cauchy problem with an operator coefficient of hyperbolic type. (Russian) **80k:34080**

Lomovcev, F. E. Boundary value problems for some operator-differential equations of even order. (Russian. English summary) **80c:34065**

A priori estimates of solutions of boundary value problems for some differential-operator equations of even order. (Russian) **80i:34094**

Magnickiĭ, N. A. Asymptotic behavior of solutions of differential equations with a small parameter in a Banach space. (Russian) **80d:34081**

Mamedov, K. Š. The completeness of root vector functions of a general boundary value problem for an operator-differential equation, and the application to irregular boundary value problems for partial differential equations. (Russian. Azerbaijani and English summaries) **80e:34042**

Mamedova, Š. Dž. Boundary value problems for operator-differential equations of order $2n$. (Russian) **80d:34082**

Marino, Mario Uniqueness and regularity of the solution to the Cauchy problem for an abstract, second-order differential equation. (Italian. English summary) **80i:34095**

Matahashi, Tomomi (*with* Tsutsumi, Masayoshi) On a periodic problem for pseudo-parabolic equations of Sobolev-Galpern type. **80e:34086**

Mel'nikova, I. V. (*with* Mornova, V. M.) The Cauchy problem and the method of quasireversibility for second-order equations in a Banach space. (Russian) **80i:34096**

Mika, Janusz Singular perturbation method for evolution equations in Banach spaces. **80j:34073**

Miščenko, V. O. A generalized spectral matrix for a nonselfadjoint abstract hyperbolic differential operator and an inverse problem. (Russian) **80i:34097**

Moodie, James A boundary-value problem for an ordinary differential equation whose coefficients are in a B^*-algebra. **80d:34083**

Mornova, V. M. *See* **Mel'nikova, I. V., 80i:34096**

Najman, B. Solution of a differential equation in a scale of spaces. (Serbo-Croatian summary) **80j:34074**

Nikolov, K. I. The analyticity of the solution of evolution equations. (Russian) **80e:34043**

Orazov, M. B. The completeness of systems of elementary solutions for certain operator differential equations on the half-axis and on a segment. (Russian) **80d:34084**

Perov, A. I. *See* **Aliev, A. B., 80e:34039**

Polička, A. E. (*with* Sobolevskiĭ, P. E.) Correct solvability of parabolic difference equations in Bochner spaces. (Russian) **80g:34063**

Pulkareva, T. M. The problem of the conjugation of nonstationary linear differential equations with a parameter. (Russian) **80d:34085**

Raspopova, N. S. The magnitude of the regularization parameter in the quasireversibility method. (Russian) **80j:34075**

Reid, William T. Some aspects of oscillation and boundary problem theory for Hamiltonian systems in a B^*-algebra. **80h:34073**

Romanko, V. K. Solvability of boundary value problems for higher order operator-differential equations. (Russian) **80c:34066**

On the theory of boundary value problems for equations with discontinuous coefficients. (Russian) **80d:34086**

Operational calculus and the solvability of boundary value problems. (Russian) **80j:34076**

Schmidt, Dieter Spektraleigenschaften und kanonische Fundamentallösungen linearer Differentialoperatoren bei einfachen Singularitäten. **80d:34087**

Showalter, R. E. Initial and final value problems for degenerate parabolic evolution systems. **80k:34081**

Sil'čenko, Ju. T. An evolutionary equation with an operator that generates a nonanalytic semigroup. (Russian) **80b:34075**

Sobolevskiĭ, P. E. *See* **Polička, A. E., 80g:34063**

Sova, Miroslav Inhomogeneous linear differential equations in Banach spaces. (Czech and Russian summaries) **80a:34087**

Teplins'kiĭ, Ju. V. On the problem of reducibility of countable systems of differential equations with quasiperiodic coefficients. (Russian) **80m:34059**

Tsutsumi, Masayoshi *See* **Matahashi, Tomomi, 80a:34086**

Vasil'ev, V. V. Coercive solvability of abstract parabolic equations with a constant operator. (Russian) **80d:34088**

Walters, T. *See* **Kartsatos, Athanassios G., 80b:34074**

Yamada, Yoshio Note on certain nonlinear evolution equations of second order. **80h:34074**

Zaidman, Samuel Almost automorphic solutions of some abstract evolution equations. II. (Italian summary) **80e:34044**

Zeĭfman, A. I. The stability of the solutions of a differential equation in a Banach space. (Russian) **80d:34089**

Žitomirs'kiĭ, Ja. Ĭ. *See* **Borok, V. M., 80b:34071**

Secondary classifications:

Bolley, P. (*with* Camus, J.; Helffer, Bernard) Hypoellipticité pour une équation d'évolution abstraite du second ordre. **(80f:35031)**

Camus, J. *See* **Bolley, P.; et al., (80f:35031)**

Carroll, Robert Wayne ★Transmutation and operator differential equations. **(80j:35091)**

Chen, Goong Control and stabilization for the wave equation in a bounded domain. **(80b:93066)**

Crouzeix, Michel (*with* Raviart, Pierre-Arnaud) Approximation d'équations d'évolution linéaires par des méthodes multipas. **(80d:65063)**

Gaĭšun, L. N. Representation of the solutions of completely integrable linear systems. (Russian) **(80i:35172)**

Grădinaru, N. The type of an n-parameter semigroup of linear operators. (Romanian summary) **(80b:47052)**

Helffer, Bernard *See* **Bolley, P.; et al., (80f:35031)**

Hoang Van Lai *See* **Sobolevskiĭ, P. E., (80f:65084)**

Matkovskiĭ, A. P. The solvability of a boundary value problem for equations with bounded operator coefficients. (Russian) **(80k:34020)**

McClure, J. P. (*with* Wong, R.) Infinite systems of differential equations. II. **(80k:34085)**

Nikolov, K. I. Analyticity of the solutions of differential equations with a variable operator coefficient. (Russian) **(80i:35174)**

Povoas, M. On a second order degenerate hyperbolic equation. (Italian summary) **(80i:35115)**

Raviart, Pierre-Arnaud *See* **Crouzeix, Michel, (80d:65063)**

Regińska, Teresa Approximation of eigenvalues of nonselfadjoint problems on an infinite interval. (Polish) **(80k:34021)**

Showalter, R. E. Degenerate parabolic initial-boundary value problems. **(80h:35033)**

Šljusarčuk, V. E. On the question of absolute exponential stability of linear differential equations of lagging type in a Banach space. (Russian) **(80a:34118)**

Sobolevskiĭ, P. E. (*with* Hoang Van Lai) Algorithms of optimal type for the approximate solution of parabolic equations. (Russian) **(80f:65084)**

Tasche, Manfred On degenerate operator equations. **(80m:47011)**

Triggiani, Roberto On the relationship between first and second order controllable systems in Banach spaces. **(80a:93047)**

Wimmer, H. K. Exponential solutions of systems of linear differential equations of infinite order. **(80k:34014)**

Wong, R. *See* **McClure, J. P., (80k:34085)**

34G20 Nonlinear equations [See also 47Hxx.]

Aĭzengendler, P. G. (*with* Vaĭnberg, M. M.) The branching and stability of periodic solutions of differential equations with a nonanalytic right-hand side. (Russian) **80i:34098**

Akinyele, Olusola Asymptotic stability for nonlinear abstract Cauchy problem. (Italian summary) **80h:34075**

Vector Lyapunov functions and pth-order conditional stability and boundedness. **80k:34082**

Angelov, V. G. (*with* Baĭnov, D. D.) Existence and uniqueness of the solution to the generalized Cauchy initial value problem for some nonlinear integro-differential equations in a space of integrable functions. (Russian) **80m:34060**

Arino, Ovide (*with* Gautier, Serge) Stabilité d'un ensemble fermé pour une équation différentielle à argument retardé. (English summary) **80b:34076**

Baĭnov, D. D. *See* **Angelov, V. G., 80m:34060**

Baouendi, M. S. (*with* Goulaouic, C.) Le théorème de Nishida pour le problème de Cauchy abstrait par une méthode de point fixe. **80d:34090**

Bates, Peter W. Hilbert space methods for nonlinear elliptic equations. **80i:34099**

Bernfeld, Stephen R. (*with* Lakshmikantham, V.; Leela, S.) A generalized comparison principle and monotone method for second-order boundary value problems in Banach spaces. **80e:34045**

(*with* Lakshmikantham, V.) Monotone methods for nonlinear boundary value problems in Banach spaces. **80i:34100**

Blakeley, W. T. F. (*with* Pritchard, Anthony J.) Stability of abstract evolution equations. **80g:34064**

Castaing, Charles Équation différentielle multivoque avec contrainte sur l'état dans les espaces de Banach. **80c:34067**

Solutions continues à droite d'une équation différentielle multivoque avec contrainte sur l'état. (English summary) **80d:34091**

Chandra, Jagdish (*with* Lakshmikantham, V.; Mitchell, A. Richard) Existence of solutions of boundary value problems for nonlinear second-order systems in a Banach space. **80f:34056**

Crandall, Michael G. Ordinary differential equations in infinite dimensions and accretive operators. **80e:34046**

Da Prato, Giuseppe Some remarks on an operational time-dependent equation. **80i:34101**

De Blasi, F. S. (*with* Myjak, J.) The generic property of existence of solutions for a class of multivalued differential equations in Hilbert spaces. **80h:34076**

(*with* Kwapisz, Marian; Myjak, J.) Generic properties of functional equations. **80h:34077**

Deimling, Klaus Cone-valued periodic solutions of ordinary differential equations. **80i:34102**

Domínguez Benavides, Tomás An existence theorem for implicit differential equations in a Banach space. **80g:34065**

Dorroh, J. R. (*with* Graff, Richard A.) Integral equations in Banach spaces, a general approach to the linear Cauchy problem, and applications to the nonlinear problem. **80j:34077**

Džumabaev, D. S. Reduction of boundary value problems to problems with a parameter and a justification of the shooting method. (Russian. Kazakh summary) **80g:34066**

Boundary value problems for infinite systems of differential equations. (Russian) **80k:34083**

Èlendieva, A. A. Behavior of the solutions of differential equations in locally convex spaces in the presence of unlimited time increase. (Russian) **80b:34077**

Eisenfeld, Jerome (*with* Lakshmikantham, V.) Differential inequalities and flow-invariance via linear functionals. **80h:34078**

Gaĭšun, I. V. The total derivative equations with periodic coefficients. (Russian. English summary) **80j:34078**

Gautier, Serge *See* **Arino, Ovide, 80b:34076**

Gilioli, Antonio A class of second-order evolution equations with double characteristics. **80m:34061**

Goldstein, Jerome A. The exact amount of nonuniqueness for singular ordinary differential equations in Banach spaces with an application to the Euler-Poisson-Darboux equation. **80k:34084**

Goulaouic, C. *See* **Baouendi, M. S., 80d:34090**

Graff, Richard A. *See* **Dorroh, J. R., 80j:34077**

Guichet, M. Th. Réductibilité de certaines équations différentielles dans des espaces de Banach de dimension quelconque. (English and German summaries) **80i:34103**

Hanebaly, Elaïdi Solutions périodiques d'équations différentielles non linéaires en dimension infinie. (English summary) **80b:34078**

Huang, Fa Lun Perturbation of uniform asymptotic stability for nonlinear differential equations. II. (Chinese) **80h:34079**

Ichikawa, Akira (*with* Pritchard, Anthony J.) Existence, uniqueness, and stability of nonlinear evolution equations. **80j:34079**

Itô, Masayuki The conditional stability of stationary solutions for semilinear parabolic differential equations. **80e:34047**

Kardašov, V. R. The boundedness and stability of the solutions of some nonlinear equations in Banach space. (Russian) **80j:34080**

Kartsatos, Athanassios G. Boundary value problems for abstract evolution equations. **80i:34104**

Krasnoborov, N. A. Investigation of the stability of solutions of a quasilinear operator equation of parabolic type. (Russian) **80m:34062**

Küpper, Tassilo The lowest point of the continuous spectrum as a bifurcation point. **80m:34063**

Kwapisz, Marian *See* **De Blasi, F. S.; et al., 80h:34077**

Lakshmikantham, V. *See* **Bernfeld, Stephen R.; et al., 80e:34045; Chandra, Jagdish; et al., 80f:34056; Eisenfeld, Jerome, 80h:34078** *and* **Bernfeld, Stephen R., 80i:34100**

Leela, S. *See* **Bernfeld, Stephen R.; et al., 80e:34045**

Lemmert, Roland (*with* Volkmann, Peter) Über die Existenz von Lösungen für Randwertprobleme in konvexen Mengen. **80h:34080**

Matahashi, Tomomi *See* **Tsutsumi, Masayoshi, 80h:34083**

McClure, J. P. (*with* Wong, R.) Infinite systems of differential equations. II. **80k:34085**

Medeiros, Luiz Adauto J. On a new class of nonlinear wave equations. **80f:34057**

Mika, Janusz Asymptotic methods for singularly perturbed linear differential equations in Banach spaces. **80i:34105**

Miloslavskiĭ, A. I. On the Floquet theory for parabolic equations. (Russian) **80k:34086**

Mitchell, A. Richard *See* **Chandra, Jagdish; et al., 80f:34056**

Mosjagin, V. V. Generalized solutions of differential equations in a locally convex space. (Russian. Kazakh summary) **80a:34088**

Myjak, J. *See* **De Blasi, F. S., 80h:34076** *and* **De Blasi, F. S.; et al., 80h:34077**

Nakao, Mitsuhiro (*with* Nanbu, Tokumori) Asymptotic stability of a nonlinear second-order evolution equation with unbounded damping. **80h:34081**

A difference inequality and its application to nonlinear evolution equations. **80b:34079**

Nambu, Takao Asymptotic behavior of solutions of a class of nonlinear differential equations in Banach space. **80f:34058**

Nanbu, Tokumori *See* **Nakao, Mitsuhiro, 80h:34081**

Netes, V. A. An existence and uniqueness theorem for the solution of an ordinary differential equation in a locally convex space. (Russian) **80h:34082**

Neustupa, Jiří A contribution to the theory of stability of differential equations in Banach space. **80b:34080**

Nurekenov, T. K. Theorems on the existence and uniqueness of solutions of the Cauchy problem for a nonlinear ordinary differential equation in Banach space. (Russian) **80i:34106**

Obrecht, Enrico Semilinear parabolic equations of arbitrary order in a Banach space. (Italian. English summary) **80e:34048**

Pavel, N. (*with* Ursescu, C.) Flow-invariance for higher order differential equations. **80k:34087**

Pianigiani, Giulio A density result for differential equations in Banach spaces. (Russian summary) **80b:34081**

Pikulin, V. P. The global solution of weakly nonlinear hyperbolic equations in a Hilbert space. (Russian) **80f:34059**

Pritchard, Anthony J. *See* **Blakeley, W. T. F., 80g:34064** *and* **Ichikawa, Akira, 80j:34079**

Prüss, Jan On semilinear evolution equations in Banach spaces. **80i:34107**

Redheffer, Raymond (*with* Volkmann, Peter) Differential equations in operator algebras. I. Invariance of the Siegel disk. **80i:34108**

Showalter, R. E. Sobolev equations for nonlinear dispersive systems. **80g:34067**

Smoljanov, O. G. A method for proving uniqueness theorems for evolution differential equations. (Russian) **80b:34082**

Sobolevskiĭ, E. P. An averaging principle and stability of differential equations with a small parameter. (Russian) **80j:34081**

Straškraba, Ivan (*with* Vejvoda, Otto) Correction: "Periodic solutions to abstract differential equations" (Czechoslovak Math. J. **23(98)** (1973), 635–669). **80c:34062**

Stuart, Charles A. Bifurcation pour des problèmes de Dirichlet et de Neumann sans valeurs propres. (English summary) **80c:34068**

Suhinin, M. F. The differentiability of the solution of an ordinary differential equation with respect to the initial condition. (Russian) **80b:34083**

Świerniak, Andrzej Generalization of Peano's and Osgood's theorems on differential equations in a Banach space. (Polish. Russian and English summaries) **80i:34109**

Szufla, Stanisław On the existence of solutions of ordinary differential equations in Banach spaces. (Italian summary) **80d:34092**

Teplins'kiĭ, Ju. V. Invariant tori of countable systems of differential equations. (Russian. English summary) **80g:34068**

Titenskiĭ, M. N. An iteration method for solving parabolic equations. (Russian) **80j:34082**

Tsutsumi, Masayoshi (*with* Matahashi, Tomomi) On some nonlinear pseudoparabolic equations. **80h:34083**

Ursescu, C. *See* **Pavel, N., 80k:34087**

Vainberg, M. M. *See* **Aĭzengendler, P. G., 80i:34098**

Vejvoda, Otto *See* **Straškraba, Ivan, 80c:34062**

Volkmann, Peter Ausdehnung eines Satzes von Max Müller auf unendliche Systeme von gewöhnlichen Differentialgleichungen. **80d:34093**

See also **Lemmert, Roland, 80h:34080** *and* **Redheffer, Raymond, 80i:34108**

Walter, Wolfgang Existence theorems for a two-point boundary value problem in Banach space. **80j:34083**

Ward, James R., Jr. Boundary value problems for differential equations in Banach space. **80i:34110**

Webb, G. F. Compactness of bounded trajectories of dynamical systems in infinite-dimensional spaces. **80j:34084**

Wong, R. *See* **McClure, J. P., 80k:34085**

Yamada, Yoshio On the decay of solutions for some nonlinear evolution equations of second order. **80b:34084**

Secondary classifications:

Bazley, Norman W. Approximation of wave equations with reproducing nonlinearities. **(80i:65076)**

Bykov, Ja. V. *See* **Kabulov, R., (80e:47051)**

Domínguez Benavides, Tomás Dynamical system for a nonautonomous differential equation with α-Lipschitz operator. **(80j:34044)**

Fuchssteiner, Benno Application of hereditary symmetries to nonlinear evolution equations. **(80j:35051)**

Gallun, L. N. On the stability of fully integrable systems in a Banach space. (Russian) **(80h:35014)**

Goldstein, Jerome A. (*with* Sandefur, James T., Jr.) Abstract equipartition of energy theorems. **(80d:47008)**

Gripenberg, Gustaf On some integral and integro-differential equations in a Hilbert space. **(80i:45022)**

Grisvard, Pierre Nonlinear abstract evolution equations of parabolic type in the sense of G. Da Prato and P. Grisvard. (Italian. English summary) **(80c:47044)**

Heinze, Joachim Die Automorphismen und die Invarianzgruppe der Algebra der konvergenten Potenzreihen eines Banachraumes. **(80m:17005)**

Hounie, Jorge G. Global hypoellipticity of periodic first-order evolution operators. **(80f:35033)**

Kabulov, R. (*with* Bykov, Ja. V.) Unbounded solutions of a certain class of nonlinear equations. (Russian. Kazakh summary) **(80e:47051)**

Kačur, Jozef Method of Rothe and nonlinear parabolic boundary value problems of arbitrary order. **(80a:35061)**

Kartsatos, Athanassios G. Perturbations of M-accretive operators and quasi-linear evolution equations. **(80b:47072)**

Mawhin, Jean Boundary value problems at resonance for vector second-order nonlinear ordinary differential equations. **(80h:47070)**

Mignanego, Fausto Optimal control of abstract evolution equations over unbounded time domains. (Italian summary) **(80k:49007)**

Naumann, Joachim On second-order evolution inequalities of Volterra type. **(80i:45024)**
(*with* Wulst, M.) On evolution inequalities of Bingham type in three dimensions. I. **(80g:47058)**

Nurekenov, T. K. (*with* Žusanbaev, S. N.) The asymptotic stability in the first approximation of the solutions of countable systems of differential equations. (Russian) **(80a:34061)**

Rzepecki, Bogdan A generalization of Banach's contraction theorem. (Russian summary) **(80d:54060)**

Salvadori, Luigi The use of two indices in the stability problem. (Italian) **(80a:34077)**

Sandefur, James T., Jr. *See* **Goldstein, Jerome A., (80d:47008)**

Sedenko, V. I. The normal form of nonlinear partial differential equations on the real axis. (Russian) **(80b:35006)**

Tartar, L. Quelques remarques sur les systèmes semi-linéaires. **(80b:35036)**

Tolstonogov, A. A. Differential inclusions in Banach spaces and continuous selectors. (Russian) **(80b:34011)**

Trubnikov, Ju. V. Accretive differential equations. (Russian) **(80m:47049)**

Véron, Laurent Équations non linéaires avec conditions aux limites de type Sturm-Liouville. **(80j:47088)**

Watanabe, Michiaki Convergence and approximation of integral solutions of nonlinear evolution equations. **(80d:47096)**

Weissler, Fred B. Semilinear evolution equations in Banach spaces. **(80i:47091)**

Wexler, D. Frequency domain stability for a class of equations arising in reactor dynamics. **(80i:45007)**

Wulst, M. *See* **Naumann, Joachim, (80g:47058)**

Žusanbaev, S. N. *See* **Nurekenov, T. K., (80a:34061)**

34G99 None of the above, but in this section

Matahashi, Tomomi (*with* Tsutsumi, Masayoshi) Periodic solutions of semilinear pseudoparabolic equations in Hilbert space. **80j:34085**

Methlouthi, Hamid Sur l'évolution d'un compact mobile régi par une loi différentielle. (English summary) **80g:34069**

Moroşanu, Gheorghe Asymptotic behaviour of solutions of differential equations associated to monotone operators. **80m:34064**

Rossi, Anna Maria (*with* Sambuceti, Patrizia) The existence of a local solution of an evolution equation in Banach spaces. (Italian. English summary) **80i:34111**

Sambuceti, Patrizia *See* **Rossi, Anna Maria, 80i:34111**

Tolstonogov, A. A. Properties of solutions of differential inclusions in a Banach space. (Russian) **80m:34065**

Tsutsumi, Masayoshi *See* **Matahashi, Tomomi, 80j:34085**

Zecca, Pietro (*with* Zezza, Pierluigi) Nonlinear boundary value problems in Banach spaces for multivalue differential equations on a noncompact interval. **80h:34084**

Zezza, Pierluigi *See* **Zecca, Pietro, 80h:34084**

Secondary classifications:

Bainov, D. D. *See* **Nikolova, T. St., (80a:34117)**

Barbu, Viorel Hamiltonian systems in a neighborhood of a saddle point. **(80j:49013)**

Butzer, P. L. (*with* Dickmeis, W.; Nessel, R. J.) Lax-type theorems with orders in connection with inhomogeneous evolution equations in Banach spaces. **(80a:65103)**

Chojnowska-Michalik, Anna Representation theorem for general stochastic delay equations. (Russian summary) **(80a:60083)**

Dickmeis, W. *See* **Butzer, P. L.; et al., (80a:65103)**

Feščenko, S. F. (*with* Sotničenko, M. A.) Asymptotic solution for an infinite system of differential equations. (Russian) **(80b:34066)**

Nessel, R. J. *See* **Butzer, P. L.; et al., (80a:65103)**

Nikolova, T. St. (*with* Bainov, D. D.) A boundary value problem for an infinite system of differential equations. (Russian. Kazakh summary) **(80a:34117)**

Sotničenko, M. A. *See* **Feščenko, S. F., (80b:34066)**

Stanković, B. Linear differential equation with coefficients in a ring of Mikusiński operators. **(80a:34006)**

34H05 Control problems [See also 49–XX, 93–XX.]

Genev, D. Ž. Solution and algorithmization of the linear optimal problem with Cauchy-Nicoletti boundary conditions. (Bulgarian. Russian and English summaries) **80k:34088**

Hiriş, V. (*with* Megan, Mihail) Controllability, observability and invariant subspaces. (Romanian. English summary) **80d:34094**

Koh Hock Lye A sufficient condition for global solution of Riccati equation. **80m:34066**

Megan, Mihail *See* **Hiriş, V., 80d:34094**

Secondary classifications:

Akulenko, L. D. Control of motion of a nonlinear vibratory system by displacement of the equilibrium point. **(80e:93081)**

Alekseev, N. K. (*with* Rettiev, N. S.) The dependence of the control set on the parameter. (Russian) **(80a:93022)**

Allwright, D. J. *See* **Mees, Alistair I., (80g:34041)**

Baltmans, M. Switching lines on the plane. (Russian) **(80b:49011)**

Ball, J. M. (*with* Slemrod, M.) Nonharmonic Fourier series and the stabilization of distributed semilinear control systems. **(80f:93065)**

Cook, P. A. Circle theorems and functional analytic methods in stability theory. **(80g:93066)**

Daščevskiĭ, M. L. Algorithmization of the semi-invariant method of studying nonlinear dynamic systems. **(80a:93018)**

Getz, Wayne M. Optimal harvesting of structured populations. **(80h:92014)**

Hájek, Otomar Discontinuous differential equations. I, II. **(80i:49030)**

Kapur, J. N. Optimal harvesting of animal populations. **(80h:92013)**

Krabotko, V. V. (*with* Razmyslovič, G. P.) On the problem of complete control of dynamical systems. (Russian) **(80g:93026)**

Ludwig, Donald Optimal harvesting of a randomly fluctuating resource. I. Application of perturbation methods. **(80h:92015a)**
(*with* Varah, James M.) Optimal harvesting of a randomly fluctuating resource. II. Numerical methods and results. **(80h:92015b)**

Mees, Alistair I. (*with* Allwright, D. J.) Using characteristic loci in the Hopf bifurcation. **(80g:34041)**

Mikołajczyk, Leon (*with* Walczak, Stanisław) Theorems on the number of switchings for linear analytical systems. (Russian summary) **(80a:49028)**

Muñoz Valcarcel, Fernando Transition time in harmonic-exponential systems. (Spanish) **(80c:34031)**

Nepomiastchy, Pierre Study of a system controllable by a differential inequality. (Russian) **(80j:93024)**

Razmyslovič, G. P. *See* **Krabotko, V. V., (80g:93026)**

Rettiev, N. S. *See* **Alekseev, N. K., (80a:93022)**

Samsonov, V. A. *See* **Vasenin, V. A., (80b:93013)**

Slemrod, M. *See* **Ball, J. M., (80f:93065)**

Varah, James M. *See* **Ludwig, Donald, (80h:92015b)**

Vasenin, V. A. (*with* Samsonov, V. A.) Some properties of the impact-impulse control of a linear system. (Russian. English summary) **(80b:93013)**

Walczak, Stanisław *See* **Mikołajczyk, Leon, (80a:49028)**

34Kxx Functional-differential and differential-difference equations, with or without deviating (or retarded) arguments

Secondary classifications:

Marčenko, V. M. Controllability of systems with lag. (Russian) **(80a:93037)**

(Peitgen, Heinz-Otto) *See* **Functional differential equations and approximation of fixed points, (80g:00005)**

(Šarkovs'kiĭ, O. M.) *See* **Asymptotic behavior of solutions of functional-differential equations, (80j:34001)**

(Walther, Hans-Otto) *See* **Functional differential equations and approximation of fixed points, (80g:00005)**

Approximation of fixed points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**

Asymptotic behavior of solutions of functional-differential equations ★Асимптотическое поведение решений дифференциально-функциональных уравнений. (Russian) [Asymptotic behavior of solutions of functional-differential equations] **(80j:34001)**

Bonn *See* **Functional differential equations and approximation of fixed points, (80g:00005)**

Conference:
Functional Differential Equations and Approximation of Fixed Points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**

Functional differential equations *See* **Asymptotic behavior of solutions of functional-differential equations, (80j:34001)**

Functional differential equations and approximation of fixed points ★Functional differential equations and approximation of fixed points. **(80g:00005)**

Summer School:
Functional Differential Equations and Approximation of Fixed Points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**

34K05 General theory

Bainov, D. D. *See* **Dočev, D. Tr., 80a:34089** *and* **Dočev, D. Tr., 80g:34070**

Berezanskiĭ, L. M. A class of linear functional-differential equations. (Russian) **80d:34095**

Braaksma, B. L. J. (*with* Harris, William A., Jr.) Laplace integrals and factorial series in singular functional-differential systems. **80i:34112**

Cerone, P. *See* **Hill, J. M.; et al., 80h:34085**

Chen, Wen Liang (*with* Shih, Yen P'ing) Shift Walsh matrix and delay-differential equations. **80d:34096**

Czerwik, Stefan Existence and uniqueness of solutions of a functional-differential equation. **80j:34086**

Dočev, D. Tr. (*with* Bainov, D. D.) The existence of solutions to a class of multivalued differential equations with deviating argument. (Russian) **80g:34070**

(*with* Baĭnov, D. D.) Existence of solutions of a class of multivalued differential equations with deviating argument. (Russian) **80a:34089**

Dyson, Janet (*with* Villella Bressan, Rosanna) Semigroups of translations associated with functional and functional-differential equations. **80f:34113**

Futák, Ján On the existence and boundedness of solutions of a nonlinear delay differential system. **80g:34071**

Hale, Jack K. Ordinary and partial functional-differential equations. **80j:34087**

Harris, William A., Jr. *See* **Braaksma, B. L. J., 80f:34112**

Henry, M. S. (*with* Wiggins, Kenneth L.) Applications of approximation theory to differential equations with deviating arguments. **80a:34090**

Hill, J. M. (*with* Laird, Philip G.; Cerone, P.) Mellin-type integral equations for solutions of differential-difference equations. **80h:34085**

Izé, Antonio Fernandes Systems of autonomous linear functional-differential equations of neutral type and perturbed systems. (Portuguese) **80j:34088**

Jarník, Jiří (*with* Kurzweil, Jaroslav) Extension of a Scorza-Dragoni theorem to differential relations and functional-differential relations. **80b:34086**

Kamen, Edward W. An operator theory of linear functional differential equations. **80a:34091**

Kappel, F. (*with* Schappacher, Wilhelm) Nonlinear functional differential equations and abstract integral equations. **80m:34067**

Kovač, Ju. I. ★Приближенное интегрирование n-тоqeqnoĭ zadaqi. (Russian) [Approximate integration of the n-point problem] **80g:34072**

Kunisch, Karl Abstract Cauchy problem and abstract integral equations for neutral functional-differential equations. **80i:34114**

Neutral functional-differential equations in L^p-space and averaging approximations. **80i:34115**

Kurzweil, Jaroslav *See* **Jarník, Jiří, 80b:34086**

Laird, Philip G. *See* **Hill, J. M.; et al., 80h:34085**

Levi, D. (*with* Ragnisco, O.) Extension of the spectral-transform method for solving nonlinear differential difference equations. **80a:34092**

Lightbourne, James H., III Function space flow invariance for functional-differential equations of retarded type. **80j:34089**

Lim, Eng-Bin Approximate solutions of functional differential equations. **80g:34073**

Morchalo, Jaroslaw On the existence and uniqueness of solutions of differential-integral equations with a deviated argument. **80a:34093**

Otakulov, S. Differential equations with a multivalued right-hand side and retarded argument. (Russian) **80g:34074**

Ragnisco, O. *See* **Levi, D., 80a:34092**

Rvačov, V. O. Atomic functions. (Russian) **80k:34089**

Rzepecki, Bogdan Note on the differential equation $F(t, y(t), y(h(t)), y'(t)) = 0$. **80d:34097**

Schappacher, Wilhelm *See* **Kappel, F., 80m:34067**

Shih, Yen P'ing *See* **Chen, Wen Liang, 80d:34096**

Suárez, Rodolfo Functional differential equations of advanced type. **80d:34098**

Villella Bressan, Rosanna *See* **Dyson, Janet, 80f:34113**

Wiggins, Kenneth L. *See* **Henry, M. S., 80a:34090**

Secondary classifications:

Aliev, N. M. *See* **Aliev, Rafik M., (80e:45007)**

Aliev, Rafik M. (*with* Aliev, N. M.) An initial problem for a system of integro-differential equations with deviating argument. (Russian) **(80e:45007)**

Baĭnov, D. D. (*with* Miluševa, Svetla D.) On the application of a method of partial averaging to the solution of multipoint boundary value problems with a nonlinear boundary condition for systems of integro-differential equations. (Russian. Bulgarian and English summaries) **(80m:45012)**

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Bastin, Henri (*with* Delchambre, Monique; Janssens, Paul) Sur l'application des équations à retard au problème du ralentissement des neutrons. (English summary) **(80c:82043)**

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Janiak, T. (*with* Łuczak-Kumorek, E.; Kisielewicz, M.) Existence theorem for functional-differential relations. **(80h:34012)**

Janssens, Paul *See* **Bastin, Henri; et al., (80c:82043)**

Kisielewicz, M. *See* **Janiak, T.; et al., (80h:34012)**

Kwapisz, Marian *See* **De Blasi, F. S.; et al., (80h:34077)**

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34K10 Boundary value problems

Aleskerov, F. M. A boundary value problem for differential equations with a deviating argument. (Russian. Azerbaijani and English summaries) **80e:34049**

Aliev, G. F. *See* **Aliev, Rašid Musa, 80k:34090**

Aliev, Rašid Musa (*with* Aliev, G. F.) Justification of a certain approximate method in connection with the solution of boundary value problems for second-order differential equations of neutral type. (Russian. Azerbaijani and English summaries) **80k:34090**

Baĭnov, D. D. *See* **Konstantinov, M. M., 80a:34095; Konstantinov, M. M., 80a:34096; Nikolova, T. St., 80a:34097; Nikolova, T. St., 80b:34087; Konstantinov, M. M., 80c:34071** *and* **Nikolova, T. St., 80k:34092**

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Drahlin, M. E. (*with* Plyševskaja, T. K.) On the theory of functional-differential equations. (Russian) **80g:34075**

Dyson, Janet (*with* Villella Bressan, Rosanna) A nonlinear boundary problem for a functional-differential equation. **80f:34116**

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Kamenskiĭ, A. G. The stable solvability of boundary value problems for autonomous differential equations with deviating argument. (Russian) **80e:34050**

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Konstantinov, M. M. (*with* Baĭnov, D. D.) Boundary value problems with two conditions for first order functional-differential equations. (Russian) **80c:34071**

(*with* Baĭnov, D. D.) A boundary value problem with a parameter for a differential equation with deviating argument. (Russian) **80a:34095**

(*with* Baĭnov, D. D.) Boundary value problems with two conditions for first order functional differential equations. (Russian) **80a:34096**

Lepiaa, È. I. A two-point boundary value problem for a second-order differential-functional equation. (Russian) **80i:34117**

Maksudov, F. G. (*with* Mardanov, I. D.; Šamilov, A. H.) A special boundary value problem for nonlinear differential equations with deviating argument of neutral type. (Russian. Azerbaijani and English summaries) **80f:34061**

Mardanov, I. D. (*with* Šamilov, A. H.) Sufficient solvability conditions of a boundary value problem for nonlinear differential equations with a deviating argument of neutral type. (Russian. Azerbaijani and English summaries) **80e:34051**

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Nikolova, T. St. (*with* Baĭnov, D. D.) A boundary value problem for differential equations of superneutral type with control. (Russian. Bulgarian and English summaries) **80b:34087**

(*with* Baĭnov, D. D.) A boundary value problem with infinite defect for differential equations of superneutral type with control. (Russian) **80a:34097**

(*with* Baĭnov, D. D.) On a multipoint boundary value problem for differential equations with deviating argument. (Bulgarian. Russian and English summaries) **80k:34092**

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Cygankova, L. A. Practical stability of some boundary value problems with constant delay. (Russian, English summary) **(80g:34083)**

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34K15 Qualitative theory

Alt, Wolfgang Some periodicity criteria for functional differential equations. **80a:34059**

Periodic solutions of some autonomous differential equations with variable time delay. **80i:34118**

Angelstorf, N. Global branching and multiplicity results for periodic solutions of functional differential equations. **80i:34119**

Arino, Ovide (*with* Séguier, Pierre) Comportement des solutions de $x'(t)+f(t, x(t))=f((t-1), x(t-1))$. (English summary) **80h:34086**

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Some nonoscillation theorems for the higher order nonlinear functional differential equations. **80a:34101**

(*with* Yeh, Cheh Chih) Asymptotic nature of nonoscillatory solutions of nonlinear deviating differential equations. **80m:34068**

Chow, Shui Nee (*with* Hale, Jack K.) Periodic solutions of autonomous equations. **80a:34102**

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Kaplan, James L. (*with* Sorg, M.; Yorke, James A.) Solutions of $x'(t)=f(x(t), x(t-L))$ have limits when f is an order relation. **80b:34088**

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Karpuk, V. V. On the theory of pointwise degeneracy of systems with several lags. (Russian) **80a:34104**

Kartsatos, Athanassios G. (*with* Toro, J.) Oscillation and asymptotic behavior of forced nonlinear equations. **80h:34091**

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Kačment, P. A. On Floquet theory for periodic linear differential equations with deviating argument. (Russian) **80h:34092**

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Kusano, Takaši (*with* Naito, Manabu) On the oscillation of fourth-order nonlinear differential equations with deviating argument. **80h:34093**

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Ladde, G. S. Oscillations caused by retarded perturbations of first-order linear ordinary differential equations. (Italian summary) **80j:34097**

Lillo, J. C. First order periodic differential difference equations. **80k:34096**

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McCalla, Clement Zeros of the solutions of first-order functional-differential equations. **80h:34095**

Oscillatory and asymptotic behavior of second-order functional differential equations. **80i:34122**

Miluševa, Svetla D. (*with* Bainov, D. D.) Justification of the averaging method for a class of functional-differential equations with impulses. (Russian) **80k:34096**

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Estimation of the solutions of first order differential equations with lag. (Russian) **80a:34107**

Mokeičev, V. S. Periodic solutions of linear differential equations with deviating argument. (Russian) **80a:34106**

Murakami, Haruo (*with* Yeh, Cheh Chih) Note on asymptotic behavior of solutions of functional differential equations. **80a:34108**

Nabahan, S. Oscillation criteria for a class of nonlinear vector delay-differential equations. **80a:34109**

Naito, Manabu *See* **Kusano, Takaši, 80h:34093**

Nguen Khak Lan Study of oscillations in nonlinear systems with slowly changing parameters and with lag. (Russian) **80c:34075**

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Ohriska, Ján The influence of argument delay on oscillatory properties of a second-order differential equation. (Russian summary) **80d:34101**

Oláh, Rudolf Note on the oscillatory behavior of bounded solutions of higher order differential equation with retarded argument. **80c:34076**

Onose, Hiroshi Oscillation of a functional differential equation arising from an industrial problem. **80b:34091**

On fourth-order non-linear oscillations of functional differential equations. **80d:34102**

Nonlinear oscillation of fourth-order functional-differential equations. **80j:34098**

Forced oscillation for functional differential equations of fourth order. **80i:34123**

See also **Graef, John R.; et al., 80m:34069**

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Oscillatory and asymptotic behaviour of all solutions of differential equations with deviating arguments. **80a:34110**

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A comparison result in oscillation theory. **80m:34033**

See also **Staïkos, V. A., 80g:34080**

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Šarkovs'kiĭ, O. M. Functional-differential equations with a finite group of argument transformations. (Russian) **80m:34071**

Schappacher, Wilhelm *See* **Kappel, F., 80g:34078** *and* **Kunisch, Karl, 80m:34070**

Schmitt, Klaus Periodic solutions of delay-differential equations. **80m:34072**

Séguier, Pierre *See* **Arino, Ovide, 80h:34086**

Sficas, Ioannis G. On the behavior of nonoscillatory solutions of differential equations with deviating argument. **80h:34098**

See also **Grammatikopoulos, M. K.; et al., 80c:34072**

Singh, Bhagat On oscillation and asymptotic nonoscillation of functional retarded equations. **80a:34111**

Necessary and sufficient conditions for eventually vanishing oscillatory solutions of functional equations with small delays. **80c:34077**

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Necessary and sufficient condition for maintaining oscillations and nonoscillations in general functional equations and their asymptotic properties. **80b:34092**

Šišolák, František On the boundedness of the solutions of a second-order differential equation with retarded argument. (Slovak. English and Russian summaries) **80f:34062**

Skripnik, V. P. Behavior of the solutions for systems of functional-differential equations. (Russian. English summary) **80m:34073**

Sljusarčuk, V. E. Bounded solutions of nonlinear almost periodic functional-differential equations. (Russian. English summary) **80k:34099**

Šoltés, Pavel Oscillation of solutions of a non-linear delay differential equation of the fourth order. **80c:34078**

Sorg, M. *See* **Kaplan, James L.; et al., 80b:34088**

Spikes, Paul W. *See* **Graef, John R.; et al., 80m:34069**

Staikos, V. A. (*with* Philos, Christos G.) Nonoscillatory phenomena and damped oscillations. **80g:34080**

See also **Grammatikopoulos, M. K.; et al., 80c:34072**

Stech, Harlan W. The Hopf bifurcation: a stability result and application. **80k:34100**

Tomaras, Alexander Oscillatory behaviour of first order delay differential equations. **80a:34112**

Toro, J. *See* **Kartsatos, Athanassios G., 80h:34091**

Tramov, M. I. Some questions of the theory of oscillation of solutions of differential equations with deviating argument. (Russian) **80j:34099**

Vogl, F. Das Wachstum ganzer Lösungen gewisser linearer Funktional-Differentialgleichungen. (English summary) **80b:34093**

Walther, Hans-Otto A theorem on the amplitudes of periodic solutions of differential delay equations with applications to bifurcation. **80g:34081**

On instability, ω-limit sets and periodic solutions of nonlinear autonomous differential delay equations. **80i:34125**

Werbowski, Jaroslav Note on the asymptotic behavior of the solutions of differential equations with deviating arguments. (Russian summary) **80g:34082**

Yeh, Cheh Chih Further results on asymptotic behavior of solutions of functional differential equations. (Italian summary) **80c:34079**

Nonoscillation of nonlinear retarded differential equations. **80h:34101**

See also **Murakami, Haruo, 80a:34108**; **Chen, Lu San, 80d:34099** *and* **Chen, Lu San, 80m:34068**

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See also **Milusheva, Svetla D., (80f:45018)**

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Hristova, S. G. *See* **Bainov, D. D., (80a:45016)**

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MacDonald, Norman ★Time lags in biological models. **(80j:92010)**

Mawhin, Jean (*with* Walter, Wolfgang) Periodic solutions of ordinary differential equations with one-sided growth restrictions. **(80i:34063)**

Milusheva, Svetla D. (*with* Bainov, D. D.) Application of the averaging method for systems of integro-differential equations of Fredholm type with impulses. (Russian) **(80f:45018)**

Sawano, Kensuke Exponential asymptotic stability for functional-differential equations with infinite retardations. **(80k:34107)**

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Walter, Wolfgang *See* **Mawhin, Jean, (80i:34063)**

34K20 Stability theory

Ahmerov, R. R. (*with* Kazakova, N. G.; Pokrovskiĭ, A. V.) Principle of the absence of bounded solutions and the absolute stability of equations of neutral type. (Russian) **80k:34101**

Akinyele, Olusola On the eventual asymptotic behaviour of perturbed functional-differential equations. (Italian summary) **80k:34102**

Barszcz, Marek (*with* Olbrot, Andrzej W.) Stability criterion for a linear differential-difference system. **80e:34053**

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Castelan, W. B. (*with* Infante, E. F.) A Liapunov functional for a matrix neutral difference-differential equation with one delay. **80m:34074**

Cygankova, L. A. Practical stability of some boundary value problems with constant delay. (Russian. English summary) **80g:34083**

Datko, Richard A procedure for determination of the exponential stability of certain differential-difference equations. **80c:34080**

Delchambre, Monique *See* **Bastin, Henri, 80j:34100**

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Izé, Antonio Fernandes Functional-differential equations of neutral type—problems of stability and asymptotic behavior. (Portuguese) **80e:34054**

For retarded functional differential equations, uniform stability and almost asymptotic stability implies equiasymptotic stability. **80f:34063**

(*with* dos Reis, J. G.) Stability of perturbed neutral functional differential equations. **80c:34081**

(*with* Vila, A. M.) Perturbations of neutral functional differential equations with non-uniform stability behavior. **80c:34082**

Kato, Junji Razumikhin type theorems for differential equations with infinite delay. **80h:34103**

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Kolesov, Ju. S. Stability of the solutions of linear differential-difference equations of neutral type. (Russian) **80g:34084**

Lakshmikantham, V. (*with* Leela, S.) A technique in stability theory of delay-differential equations. **80i:34126**

Leela, S. *See* **Lakshmikantham, V., 80i:34126**

Martínez-Amores, Pedro An application of the invariance principle in functional-differential equations of neutral type. (Spanish) **80a:34114**

Olbrot, Andrzej W. *See* **Barszcz, Marek, 80e:34053**

Ordinas'ka, Z. P. On the question of the dichotomy of the solutions of nonlinear systems of differential equations with lag. (Russian) **80a:34115**

Pandolfi, Luciano Some observations on the asymptotic behaviour of the solutions of the equation $\dot{x} = A(t)x(\lambda t) + B(t)x(t)$, $\lambda > 0$. **80f:34064**

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Raĭkov, P. I. Conditional stability in the critical case of a zero root for systems of differential-difference equations. (Russian. Bulgarian and English summaries) **80k:34106**

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Sawano, Kensuke Exponential asymptotic stability for functional-differential equations with infinite retardations. **80k:34107**

Šljusarčuk, V. E. Strongly absolutely asymptotically stable solutions of linear differential equations with lags in a Banach space. (Russian) **80k:34108**

Stojanov, N. V. (*with* Paĭkov, P. I.) Conditional stability of the solutions of systems of differential equations with lag. (Bulgarian. Russian and English summaries) **80d:34104**

Terjéki, J. On the asymptotic stability of solutions of functional-differential equations. **80h:34104**

Vila, A. M. *See* **Izé, Antonio Fernandes, 80c:34082**

Secondary classifications:

Burton, T. A. Stability theory for Volterra equations. **(80f:45016)**

Hale, Jack K. Lyapunov-Schmidt method in differential equations. **(80i:47086)**

Hino, Yoshiyuki Almost periodic solutions of functional differential equations with infinite retardation. **(80c:34073)**

Hristov, Nikolaĭ D. *See* **Konstantinov, M. M.; et al., (80d:34106)**

Konstantinov, M. M. (*with* Patarinski, S. P.; Petkov, Petko Hr.; Hristov, Nikolaĭ D.) An algebraic criterion for the stability of linear systems with lag. (Bulgarian. Russian and English summaries) **(80d:34106)**

Patarinski, S. P. *See* **Konstantinov, M. M.; et al., (80d:34106)**

Petkov, Petko Hr. *See* **Konstantinov, M. M.; et al., (80d:34106)**

34K25 Asymptotic theory

Bagirova, N. H. Asymptotic expansion of the solution of a boundary value problem for an equation of neutral type with a small lag. (Russian. Azerbaijani and English summaries) **80k:34109**

Domnic'kiĭ, V. M. *See* **Sotničenko, M. A., 80j:34101**

Fitzpatrick, W. J. (*with* Grimm, L. J.) Linear functional-differential equations in a Banach algebra. **80i:34127**

Grimm, L. J. *See* **Fitzpatrick, W. J., 80i:34127**

Habets, Patrick Singular perturbations of functional differential equations. **80c:34083**

Jebu, C. Comportement asymptotique des solutions de l'équation $\dot{x}(t) = -f(t, x(t)) + f(t, x(t-1)) + h(t)$. **80e:34055**

Kamenskiĭ, M. I. The operator of translation along the trajectories of equations of neutral type that depend on a parameter. (Russian. Estonian and English summaries) **80h:34105**

Knjazev, A. V. The method of frozen coefficients. (Russian) **80f:34065**

Lim, Eng-Bin Asymptotic bounds of solutions of the functional differential equation $x'(t) = ax(\lambda t) + bx(t) + f(t)$, $0 < \lambda < 1$. **80a:34116**

Metodieva, M. Asymptotic single-frequency solutions of a quasilinear nonautonomous system with lag in the case of resonance. (Bulgarian. Russian and English summaries) **80e:34056**

Multi-frequency resonance oscillations of a quasilinear nonautonomous system with lag and with slowly varying parameters. (Bulgarian. Russian and English summaries) **80e:34057**

Sotničenko, M. A. (*with* Domnic'kiĭ, V. M.) The construction of asymptotic solutions of a system of linear differential equations with deviating argument. (Russian. English summary) **80j:34101**

Secondary classifications:

Arino, Ovide (*with* Gautier, Serge) Stabilité d'un ensemble fermé pour une équation différentielle à argument retardé. (English summary) **(80b:34076)**

Gautier, Serge *See* **Arino, Ovide, (80b:34076)**

Grammatikopoulos, M. K. A criterion for the existence of bounded nonoscillatory solutions for nonlinear retarded differential equatory. **(80j:34093)**

Kartsatos, Athanassios G. (*with* Toro, J.) Oscillation and asymptotic behavior of forced nonlinear equations. **(80h:34091)**

Kitamura, Yuichi (*with* Kusano, Takaŝi) Oscillation of first-order nonlinear differential equations with deviating arguments. **(80j:34096)**
Kusano, Takaŝi *See* **Kitamura, Yuichi**, **(80j:34096)**
Onose, Hiroshi Nonlinear oscillation of fourth-order functional-differential equations. **(80j:34098)**
Toro, J. *See* **Kartsatos, Athanassios G.**, **(80h:34091)**
Walther, Hans-Otto On instability, ω-limit sets and periodic solutions of nonlinear autonomous differential delay equations. **(80i:34125)**

34K30 Equations in abstract spaces

Aliev, Rašid Musa A boundary value problem for linear operator equations of neutral type in a Banach space. (Russian) **80e:34058**
Angelov, V. G. (*with* Baĭnov, D. D.) Existence and uniqueness of the global solution of the initial value problem for neutral type differential-functional equations in Banach space. **80m:34075**
Baĭnov, D. D. *See* **Nikolova, T. St.**, **80a:34117** *and* **Angelov, V. G.**, **80m:34075**
De Blasi, F. S. (*with* Myjak, J.) Some generic properties of functional differential equations in Banach spaces. **80d:34105**
Fitzgibbon, W. E. Delay equations of parabolic type in Banach space. **80j:34102**
Lakshmikantham, V. (*with* Leela, S.; Moauro, Vinicio) Existence and uniqueness of solutions of delay differential equations on a closed subset of a Banach space. **80c:34069**
Leela, S. (*with* Moauro, Vinicio) Existence of solutions in a closed set for delay differential equations in Banach spaces. **80c:34070**
See also **Lakshmikantham, V.**; **et al.**, **80c:34069**
Moauro, Vinicio *See* **Lakshmikantham, V.**; **et al.**, **80c:34069** *and* **Leela, S.**, **80c:34070**
Myjak, J. *See* **De Blasi, F. S.**, **80d:34105**
Naito, Toshiki On linear autonomous retarded equations with an abstract phase space for infinite delay. **80h:34106**
Nikolova, T. St. (*with* Baĭnov, D. D.) A boundary value problem for an infinite system of differential equations. (Russian. Kazakh summary) **80a:34117**
Rzepecki, Bogdan A functional-differential equation in a Banach space. **80j:34103**
On some classes of differential equations. **80h:34107**
Rzymowski, Witold Delay effects on the existence problems for differential equations in Banach space. **80i:34128**
Stjusarčuk, V. E. On the question of absolute exponential stability of linear differential equations of lagging type in a Banach space. (Russian) **80a:34118**

Secondary classifications:

Angelov, V. G. (*with* Baĭnov, D. D.) Existence and uniqueness of the solution to the generalized Cauchy initial value problem for some nonlinear integro-differential equations in a space of integrable functions. (Russian) **80m:34060**
Baĭnov, D. D. *See* **Angelov, V. G.**, **80m:34060**
Ichikawa, Akira Evolution equations, quadratic control, and filtering with delay. **80d:93073**
Mosjagin, V. V. Generalized solutions of differential equations in a locally convex space. (Russian. Kazakh summary) **80a:34088**
Stjusarčuk, V. E. Strongly absolutely asymptotically stable solutions of linear differential equations with lags in a Banach space. (Russian) **80k:34108**

34K35 Control problems

Hristov, Nikolaĭ D. *See* **Konstantinov, M. M.**; **et al.**, **80d:34106**
Konstantinov, M. M. (*with* Patarinski, S. P.; Petkov, Petko Hr.; Hristov, Nikolaĭ D.) An algebraic criterion for the stability of linear systems with lag. (Bulgarian. Russian and English summaries) **80d:34106**
Minjuk, S. A. (*with* Stepanjuk, N. N.) On the theory of pointwise completeness of linear systems with lag. (Russian) **80i:34129**
Patarinski, S. P. *See* **Konstantinov, M. M.**; **et al.**, **80d:34106**
Petkov, Petko Hr. *See* **Konstantinov, M. M.**; **et al.**, **80d:34106**
Stepanjuk, N. N. *See* **Minjuk, S. A.**, **80i:34129**

Secondary classifications:

Chukwu, Ethelbert Nwakuche Controllability of delay systems with restrained controls. **(80k:49026)**
Marčenko, V. M. Quasicontrollability of linear systems with aftereffect. **(80j:93022)**
Minjuk, S. A. On the theory of ideal observability of linear systems with lag. (Russian) **(80b:93034)**

34K99 None of the above, but in this section

Cassago, H., Jr. Functional differential inequalities. **80g:34085**
De Oliveira, Jose C. F. The generic θ_1-property for a class of NFDE's. **80j:34104**
Krbec, Pavel (*with* Kurzweil, Jaroslav) Kneser's theorem for multivalued differential delay equations. (Czech and Russian summaries) **80h:34108**
Kurzweil, Jaroslav *See* **Krbec, Pavel**, **80h:34108**
Marinescu, C. (*with* Marinescu, E.) On a problem of differential equations with impulses. (Romanian) **80m:34076**
Marinescu, E. *See* **Marinescu, C.**, **80m:34076**
Zabo, V. I. Stochastic behavior of systems with a finite number of phase states in the presence of aftereffect. (Russian) **80f:34066**

Secondary classifications:

Atkinson, C. The existence of steady wave solutions to a non-local version of the K.P.P. equation. **(80a:92038)**
Chojnowska-Michalik, Anna Representation theorem for general stochastic delay equations. (Russian summary) **(80a:60083)**
Driver, R. D. Can the future influence the present? **80d:83056a**
Erratum: "Can the future influence the present?" (Phys. Rev. D (3) 19 (1979), no. 4, 1098–1107). **80d:83056b**
Reddien, G. W. (*with* Webb, G. F.) Numerical approximation of nonlinear functional differential equations with L^2 initial functions. **(80c:65156)**
Webb, G. F. *See* **Reddien, G. W.**, **(80c:65156)**

35–XX PARTIAL DIFFERENTIAL EQUATIONS

35–01 Elementary exposition, textbooks

Godunov, S. K. ★Уравнения математической физики. (Russian) [Equations of mathematical physics] **80f:35001**
John, Fritz ★Partial differential equations. **80f:35001**
Mihlin, S. G. ★Линейные уравнения в частных производных. (Russian) [Linear partial differential equations] **80a:35001**
★Partielle Differentialgleichungen in der mathematischen Physik. **80b:35001**
Powers, David L. ★Boundary value problems. **80d:35001**
(Silbermann, Bernd) *See* **Mihlin, S. G.**, **80b:35001**
Tutschke, Wolfgang ★Vorlesungen über partielle Differentialgleichungen. **80i:35002**

Secondary classifications:

Amenzade, Ju. A. ★Theory of elasticity. **(80b:73001)**
Arsenin, V. Ja. ★Matematická fyzika. (Slovak) [Mathematical physics] **(80a:00016)**
Brown, James Ward *See* **Churchill, Ruel V.**, **(80e:42001)**
Churchill, Ruel V. (*with* Brown, James Ward) ★Fourier series and boundary value problems. **(80e:42001)**
Flügge, Siegfried ★Mathematische Methoden der Physik. I. **(80a:00001)**
(Kačur, Jozef) *See* **Arsenin, V. Ja.**, **(80a:00016)**
(Konyaeva, M.) *See* **Amenzade, Ju. A.**, **(80b:73001)**
Kotkin, G. L. (*with* Serbo, V. G.) ★Сборник задач по классической механике. (Russian) [Collection of problems in classical mechanics] **(80f:70001)**
(Medkov, K. P.) *See* **Mihailov, V. P.**, **(80b:35002)**
Mihailov, V. P. ★Ecuaciones diferenciales en derivadas parciales. (Spanish) [Partial differential equations] **(80b:35002)**
Serbo, V. G. *See* **Kotkin, G. L.**, **(80f:70001)**
Šilmarev, I. A. ★Введение в теорию эллиптических уравнений. (Russian) [Introduction to the theory of elliptic equations] **(80g:35041)**
Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen, Landwirte ★Mathematik für Ingenieure, Naturwissenschaftler, Ökonomen, Landwirte. Bände 1–21/2. **(80d:00033)**

35–02 Advanced exposition (research surveys, monographs, etc.)

Fife, Paul C. ★Mathematical aspects of reacting and diffusing systems. **80g:35001**
Keller, Joseph B. Rays, waves and asymptotics. **80g:35002**
(Medkov, K. P.) *See* **Mihailov, V. P.**, **80b:35002**
Mihailov, V. P. ★Ecuaciones diferenciales en derivadas parciales. (Spanish) [Partial differential equations] **80b:35002**
Spagnolo, Sergio Convergence de solutions d'équations d'évolution. **80k:35001**
Stakgold, Ivar ★Green's functions and boundary value problems. **80k:35002**

Secondary classifications:

Conley, Charles ★Isolated invariant sets and the Morse index. **(80c:58009)**
Dolph, Charles L. (*with* Scott, Richard A.) Recent developments in the use of complex singularities in electromagnetic theory and elastic wave propagation. **(80k:78001)**
John, Fritz ★Partial differential equations. **(80f:35001)**
Lanckau, Eberhard Die Riemannfunktion selbstadjungierter Gleichungen. **(80k:35048)**
Oleinik, O. A. (*with* Radkevič, E. V.) The method of introducing a parameter for the investigation of evolution equations. (Russian) **(80d:35074)**
Ovsjannikov, L. V. ★Групповой анализ дифференциальных уравнений. (Russian) [Group analysis of differential equations] **(80d:58072)**
Radkevič, E. V. *See* **Oleinik, O. A.**, **(80d:35074)**
Rubinstein, L. The Stefan problem: comments on its present state. **(80j:35096)**
Scott, Richard A. *See* **Dolph, Charles L.**, **(80k:78001)**

35–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

van der Blij, F. Some details of the history of the Korteweg-de Vries equation. **(80k:01041)**
Bogdanov, Ju. S. *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**
Demidov, S. S. On the history of S. Lie's theory of partial differential equations. (Russian) **(80b:01010)**
(Du Bois-Reymond, Paul) *See* **Kosolapov, Ju. F.**; **et al.**, **(80a:01019)**
Erugin, N. P. (*with* Bogdanov, Ju. S.; Vuvunikjan, Ju. M.; Ivanov, E. A.; Krylov, V. I.; Kudrjavcev, L. D.; Radyno, Ja. V.; Uspenskiĭ, S. V.) Sergeĭ L'vovič Sobolev (on the occasion of his seventieth birthday). (Russian) **(80c:01013)**
Ivanov, E. A. *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**
Kosolapov, Ju. F. (*with* Sologub, V. S.) Du Bois-Reymond's works on the theory of partial differential equations. (Ukrainian. Russian summary) **(80a:01019)**
Krylov, V. I. *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**
Kudrjavcev, L. D. *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**
(Lie, S.) *See* **Demidov, S. S.**, **(80b:01010)**
Radyno, Ja. V. *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**
(Sobolev, S. L.) *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**
Sologub, V. S. *See* **Kosolapov, Ju. F.**, **(80a:01019)**
Uspenskiĭ, S. V. *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**
Vuvunikjan, Ju. M. *See* **Erugin, N. P.**; **et al.**, **(80c:01013)**

Biography:
Sobolev, S. L. *See* **Erugin, N. P.; et al., (80c:01013)**
Birthday:
Sobolev, S. L. *See* **Erugin, N. P.; et al., (80c:01013)**

35–04 Explicit machine computation and programs (not the theory of computation or programming)

35–06 Proceedings, conferences, etc.

(Aleksandrov, P. S.) *See* **All-Union Conference: Partial Differential Equations, 80f:35002**
(Anger, Gottfried) *See* **Inverse and improperly posed problems in differential equations, 80d:35004**
(Calogero, F.) *See* **Nonlinear evolution equations solvable by the spectral transform, 80a:35003**
(Coi, P. V.) *See* **Differential and integral equations, 80k:35004**
(Daniljuk, İ. I.) *See* **Boundary value problems for partial differential equations, 80f:35003**
(Eckhaus, Wiktor) *See* **Differential equations and applications, 80a:35002**
(Goulaouic, C.) *See* **Séminaire: Goulaouic-Schwartz, 80j:35001**
(Hörmander, Lars) *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, 80g:35003**
(de Jager, Eduard M.) *See* **Differential equations and applications, 80a:35002**
(Kreß, Rainer) *See* **Free and mixed boundary value problems, 80m:35001**
(Lopatinskiĭ, Ja. B.) *See* **Boundary value problems for partial differential equations, 80f:35003**
(Oleĭnik, O. A.) *See* **All-Union Conference: Partial Differential Equations, 80f:35002**
(Petrovskiĭ, I. G.) *See* **All-Union Conference: Partial Differential Equations, 80f:35002**
(Pham The Lai) *See* **Équations aux dérivées partielles, 80c:35001**
(Radžabov, N. R.) *See* **Differential and integral equations, 80k:35004**
(Saĭshitdinov, M. S.) *See* **Direct and inverse problems for partial differential equations and their applications, 80d:35002**
(Schwartz, Laurent) *See* **Séminaire: Goulaouic-Schwartz, 80j:35001**
(Skripnik, İ. V.) *See* **Boundary value problems for partial differential equations, 80f:35003**
(Ural'ceva, N. N.) *See* **Boundary value problems. Spectral theory, 80k:35003**
(Weck, Norbert) *See* **Free and mixed boundary value problems, 80m:35001**
All-Union Conference:
Partial Differential Equations ★Труды Всесоюзной Конференции по Уравнениям с Частными Производными. (Russian) [Proceedings of an All-Union Conference on Partial Differential Equations] **80f:35002**
Birthday:
Petrovskiĭ, I. G. *See* **All-Union Conference: Partial Differential Equations, 80f:35002**
Boundary value problems *See* **Free and mixed boundary value problems, 80m:35001**
Boundary value problems for partial differential equations ★Краевые задачи для уравнений в частных производных. (Russian) [Boundary value problems for partial differential equations] **80f:35003**
Boundary value problems. Spectral theory ★Краевые задачи. Спектральная теория. (Russian) [Boundary value problems. Spectral theory] **80k:35003**
Conference:
Équations aux Dérivées Partielles *See* **Équations aux dérivées partielles, 80c:35001**
Free and Mixed Boundary Value Problems *See* **Free and mixed boundary value problems, 80m:35001**
Mathematical and Numerical Methods for Inverse and Improperly Posed Problems in Differential Equations *See* **Inverse and improperly posed problems in differential equations, 80d:35004**
Scheveningen, Differential Equations *See* **Differential equations and applications, 80a:35002**
Differential equations *See* **Elliptische Differentialgleichungen, 80d:35003** *and* **Inverse and improperly posed problems in differential equations, 80d:35004**
Differential equations and applications ★Differential equations and applications. **80a:35002**
Differential and integral equations ★Дифференциальные и интегральные уравнения. Вып. 1. (Russian) [Differential and integral equations. No. 1] **80k:35004**
Direct and inverse problems for partial differential equations and their applications ★Прямые и обратные задачи для дифференциальных уравнений с частными производными и их приложения. (Russian) [Direct and inverse problems for partial differential equations and their applications] **80d:35002**
Elliptische Differentialgleichungen ★Elliptische Differentialgleichungen. **80d:35003**
Équations aux dérivées partielles ★Équations aux dérivées partielles. **80c:35001**
Free and mixed boundary value problems ★Free and mixed boundary value problems. **80m:35001**
Halle *See* **Inverse and improperly posed problems in differential equations, 80d:35004**
Integral equations *See* **Differential and integral equations, 80k:35004**
Inverse and improperly posed problems in differential equations ★Inverse and improperly posed problems in differential equations. **80d:35004**
Journées:
Équations aux Dérivées Partielles ★Journées: Équations aux Dérivées Partielles. **80b:35003**
★Journées: Équations aux Dérivées Partielles. **80f:35003**
Kyoto *See* **Theory of nonlinear waves, 80a:35004**
Linear differential equations *See* **Micro-local analysis of linear differential equations, 80f:35004**
Linear partial differential equations *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, 80g:35003**
Mathematical and numerical methods *See* **Inverse and improperly posed problems in differential equations, 80d:35004**
Meeting:
Elliptische Differentialgleichungen *See* **Elliptische Differentialgleichungen, 80d:35003**
Micro-local analysis *See* **Seminar: Micro-local Analysis, 80k:35005**
Micro-local analysis of linear differential equations ★Micro-local analysis of linear differential equations. (Japanese) **80f:35004**
Moscow *See* **All-Union Conference: Partial Differential Equations, 80f:35002**
Nonlinear evolution equations solvable by the spectral transform ★Nonlinear evolution equations solvable by the spectral transform. **80a:35003**
Nonlinear waves *See* **Theory of nonlinear waves, 80a:35004**
Oberwolfach *See* **Free and mixed boundary value problems, 80m:35001**
Partial differential equations *See* **Journées: Équations aux Dérivées Partielles, 80b:35003; Équations aux dérivées partielles, 80c:35001; Direct and inverse problems for partial differential equations and their applications, 80d:35002; All-Union Conference: Partial Differential Equations, 80f:35002; Journées: Équations aux Dérivées Partielles, 80f:35003; Boundary value problems for partial differential equations, 80f:35003** *and* **Séminaire: Goulaouic-Schwartz, 80j:35001**
Princeton, N.J. *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, 80g:35003**
Problems of Mathematical Analysis *See* **Boundary value problems. Spectral theory, 80k:35003**
Rome *See* **Nonlinear evolution equations solvable by the spectral transform, 80a:35003**
Rostock *See* **Elliptische Differentialgleichungen, 80d:35003**
Saint-Cast *See* **Journées: Équations aux Dérivées Partielles, 80f:35003**
Saint Jean de Monts *See* **Journées: Équations aux Dérivées Partielles, 80b:35003** *and* **Équations aux dérivées partielles, 80c:35001**
Scheveningen *See* **Differential equations and applications, 80a:35002**
Séminaire:
Goulaouic-Schwartz ★Séminaire Goulaouic-Schwartz 1978/1979: Équations aux dérivées partielles. **80j:35001**
Seminar:
Micro-local Analysis ★Seminar on Micro-local Analysis. **80k:35005**
Singularities of Solutions of Linear Partial Differential Equations ★Seminar on Singularities of Solutions of Linear Partial Differential Equations. **80g:35003**
Singularities *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, 80g:35003**
Spectral theory *See* **Boundary value problems. Spectral theory, 80k:35003**
Spectral transforms *See* **Nonlinear evolution equations solvable by the spectral transform, 80a:35003**
Symposium:
Micro-local Analysis of Linear Differential Equations *See* **Micro-local analysis of linear differential equations, 80f:35004**
Nonlinear Evolution Equations Solvable by the Spectral Transform *See* **Nonlinear evolution equations solvable by the spectral transform, 80a:35003**
Theory of Nonlinear Waves *See* **Theory of nonlinear waves, 80a:35004**
Theory of nonlinear waves ★Theory of nonlinear waves. **80a:35004**

Secondary classifications:

(Bénilan, Philippe) *See* **Journées: Analyse Non Linéaire, (80a:46002)**
(Berkovič, L. M.) *See* **Proceedings: Seminar on Differential Equations, (80k:34002)**
(Byrnes, Christopher I.) *See* **Partial differential equations and geometry, (80d:58002)**
(Fuĭčič, V. I.) *See* **Group theoretic methods in mathematical physics, (80d:00010)**
(Gérard, Raymond) *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
(Knops, R. J.) *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
(Mamedov, R. G.) *See* **Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)**
(Mitropol's'kiĭ, Ju. O.) *See* **Group theoretic methods in mathematical physics, (80d:00010)**
(Nikol'skiĭ, S. M.) *See* **Studies in the theory of differentiable functions of several variables and its applications, (80e:46001)**
(Ramis, Jean-Pierre) *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
(Robert, Jacques) *See* **Journées: Analyse Non Linéaire, (80a:46002)**
(Strygin, V. V.) *See* **Proceedings: Seminar on Differential Equations, (80k:34002)**
Besançon *See* **Journées: Analyse Non Linéaire, (80a:46002)**
Complex fields *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Conference:
Partial Differential Equations and Geometry *See* **Partial differential equations and geometry, (80d:58002)**
Differentiable functions *See* **Studies in the theory of differentiable functions of several variables and its applications, (80e:46001)**
Differential equations *See* **Studies in some questions of the constructive theory of functions and differential equations, (80d:00021); Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)** *and* **Proceedings: Seminar on Differential Equations, (80k:34002)**
Edinburgh *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
Equations différentielles et systèmes de Pfaff dans le champ complexe ★Équations différentielles et systèmes de Pfaff dans le champ complexe. **(80f:34003)**
Functions of several variables *See* **Studies in the theory of differentiable functions of several variables and its applications, (80e:46001)**
Geometry *See* **Partial differential equations and geometry, (80d:58002)**
Group theoretic methods in mathematical physics ★Теоретико-групповые методы в математической физике. (Russian) [Group-theoretic methods in mathematical physics] **(80d:00010)**
Journées:
Analyse Non Linéaire ★Journées d'analyse non linéaire. **(80a:46002)**

Mechanics *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
Nonlinear analysis *See* **Journées: Analyse Non Linéaire, (80a:46002)**
Nonlinear analysis and mechanics: Heriot-Watt Symposium ★Nonlinear analysis and mechanics: Heriot-Watt Symposium. Vol. III. **(80d:00015)**
Park City, Utah *See* **Partial differential equations and geometry, (80d:58002)**
Partial differential equations and geometry ★Partial differential equations and geometry. **(80d:58002)**
Pfaff systems *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Proceedings:
Seminar on Differential Equations ★Труды семинара по дифференциальным уравнениям. Вып. 3. (Russian) [Proceedings of a Seminar on Differential Equations. No. 3] **(80k:34002)**
Séminaire:
Equations Différentielles et Systèmes de Pfaff dans le Champ Complexe *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Seminar:
Differential Equations *See* **Proceedings: Seminar on Differential Equations, (80k:34002)**
Solitons *See* **Special issue: Solitons in physics, (80f:81004)**
Special issue:
Solitons in physics ★{Special issue on solitons in physics}. **(80f:81004)**
Strasbourg *See* **Equations différentielles et systèmes de Pfaff dans le champ complexe, (80f:34003)**
Studies in some questions of the constructive theory of functions and differential equations ★Исследования по некоторым вопросам конструктивной теории функций и дифференциальных уравнений. (Russian) [Studies in some questions of the constructive theory of functions and differential equations] **(80d:00021)**
Studies in the theory of differentiable functions of several variables and its applications ★Исследования по теории дифференцируемых функций многих переменных и ее приложениям. VII. (Russian) [Studies in the theory of differentiable functions of several variables and its applications. VII] **(80e:46001)**
Symposium:
Heriot-Watt, Nonlinear Analysis and Mechanics *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
Theory of functions *See* **Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)**

35Axx General theory

35A05 General existence and uniqueness theorems

Baouendi, M. S. (*with* Zachmanoglou, E. C.) Unique continuation of solutions of partial differential equations and inequalities from manifolds of any dimension. **80a:35005**
Berger, Melvyn S. (*with* Church, P. T.) On the complete integrability of nonlinear partial differential equations. **80h:35001**
Borodin, A. V. Differentiability with respect to the parameter of the solutions of nonlinear loaded boundary value problems for second-order partial differential equations. I. (Russian) **80e:35001**
Cardoso, Fernando (*with* Hounie, Jorge G.) Uniqueness in the Cauchy problem for first-order linear PDEs. **80g:35004**
Church, P. T. *See* **Berger, Melvyn S., 80h:35001**
Djuienkova, L. I. Uniqueness of solutions of certain differential equations. (Russian) **80j:35002**
Hounie, Jorge G. *See* **Cardoso, Fernando, 80g:35004**
Kosarev, N. G. Uniqueness of the solutions of the Cauchy problem for linear equations with variable coefficients. (Russian) **80k:35006**
de Paris, J.-Cl. (*with* Wagschal, Claude) Problème de Cauchy non caractéristique à données Gevrey pour un opérateur analytique à caractéristiques multiples. **80d:35005**
Pathak, Ram Shankar On the existence of fundamental solutions of certain boundary value problems. **80d:35006**
Šlîatskiĭ, S. P. Unicité et stabilité de problèmes de Cauchy pour des équations du second ordre. **80c:35002**
Wagschal, Claude *See* **de Paris, J.-Cl., 80d:35005**
Watanabe, Kinji Sur l'unicité dans le problème de Cauchy pour les opérateurs différentiels à caractéristiques de multiplicité constante. **80g:35005**
Zachmanoglou, E. C. *See* **Baouendi, M. S., 80a:35005**

Secondary classifications:

Đurković, Vladimir Nonlinear stationary parabolic boundary value problems in an infinite cylinder. **(80i:35099)**
Rosenbloom, P. C. Commutation relations for linear operators in Hilbert space with applications to partial differential equations. I. **(80d:47003)**
Tutschke, Wolfgang ★Vorlesungen über partielle Differentialgleichungen. **(80i:35002)**

35A07 Local existence and uniqueness theorems [See also 35H05, 35Sxx.]

Birkeland, Bent (*with* Persson, Jan) The local Cauchy problem in $\mathbf{R}^2$ at a point where two characteristic curves have a common tangent. **80c:35003**
Cardoso, Fernando ★Resolubilidade local de equações diferenciais parciais. (Portuguese) [Local solvability of partial differential equations] **80c:35004**
Persson, Jan *See* **Birkeland, Bent, 80c:35003**
Wagschal, Claude Problème de Cauchy à caractéristiques multiples dans les classes de Gevrey. **80f:35004**
Weston, Paul R. A sufficient condition for the local solvability of a linear partial differential operator with double characteristics. **80b:35004**

Secondary classifications:

Baouendi, M. S. (*with* Treves, F.; Zachmanoglou, E. C.) Flat solutions and singular solutions of homogeneous linear partial differential equations with analytic coefficients. **(80h:35034)**
Treves, F. *See* **Baouendi, M. S.; et al., (80h:35034)**
Zachmanoglou, E. C. *See* **Baouendi, M. S.; et al., (80h:35034)**

35A08 Fundamental solutions

35A10 Cauchy-Kowalewski theorems

Amirov, A. H. Uniqueness of the solution to the Cauchy problem for a Cauchy-Kovalevskaja system. (Russian) **80j:35003**
Baouendi, M. S. (*with* Zachmanoglou, E. C.) Unique continuation theorems for solutions of partial differential equations and inequalities. **80d:35007**
Elschner, Johannes Einige Bemerkungen zu einer Arbeit von Baouendi und Goulaouic. **80c:35005**
Mizohata, Sigeru Une remarque sur le théorème de Cauchy-Kowalewski. **80a:35006**
Wagschal, Claude Une nouvelle démonstration d'un théorème de Lednev. (English summary) **80d:35008**
Zachmanoglou, E. C. *See* **Baouendi, M. S., 80d:35007**

Secondary classifications:

Baouendi, M. S. (*with* Goulaouic, C.) Le théorème de Nishida pour le problème de Cauchy abstrait par une méthode de point fixe. **(80d:34090)**
Goulaouic, C. *See* **Baouendi, M. S., (80d:34090)**
Lascar, Bernard Théorème de Cauchy-Kovalevsky et théorème d'unicité d'Holmgren pour des fonctions analytiques d'une infinité de variables. **(80g:34062)**
Nishida, Takaaki A note on a theorem of Nirenberg. **(80a:58013)**

35A15 Variational methods

Secondary classifications:

Collins, W. D. Dual extremum principles for the heat equation. **(80g:49025)**
Showalter, R. E. A Green's formula for weak solutions of variational problems. **(80g:49007)**

35A20 Analytic methods, singularities

Chudnovsky, David V. One class of meromorphic solutions of general two-dimensional nonlinear equations, connected with the algebraic inverse scattering method. **80b:35005**
Dal Fabbro, Florangela (*with* Furioli Martinolli, Antonella) The analyticity of the solutions of some partial differential equations in the neighborhood of the singular points. (Italian) **80e:35002**
Furioli Martinolli, Antonella *See* **Dal Fabbro, Florangela, 80e:35002**
Gronau, D. A global version of a linear Goursat problem. (Italian summary) **80g:35006**
Tsuno, Yoshimichi Holomorphic continuation of solutions of degenerate partial differential equations in two variables. **80j:35004**

Secondary classifications:

Chang, Y. F. Solution of a nonlinear Tricomi equation by Taylor series. **(80i:35124)**
Constanda, Christian Some comments on the integration of certain systems of partial differential equations in continuum mechanics. (French summary) **(80h:73018)**

35A22 Transform methods

Koprinski, Stefan An operational method for the Bessel heat equation. **80m:35002**

Secondary classifications:

Carroll, Robert Wayne Transmutation and separation of variables. **(80g:35023)**
Hirota, Ryogo The Bäcklund and inverse scattering transform of the K-dV equation with nonuniformities. **(80e:35057)**
Mullineux, N. (*with* Reed, J. R.) Uses of integral transforms with nonstandard kernels. **(80m:44001)**
Reed, J. R. *See* **Mullineux, N., (80m:44001)**

35A25 Other special methods

Secondary classifications:

Kalnins, E. G. (*with* Miller, Willard, Jr.) *R*-separation of variables for the four-dimensional flat space Laplace and Hamilton-Jacobi equations. **(80d:22017)**
Malgrange, B. Algebraic aspects of the theory of partial differential equations. **(80d:58063)**
Miller, Willard, Jr. *See* **Kalnins, E. G., (80d:22017)**

35A30 Geometric theory, characteristics, transformations

Enikova, M. M. (*with* Karlukovski, V. I.; Velčev, C. I.) Exact finite-energy solutions in non-linear SU(2)×SU(2) and SU(2)×SU(1, 1) chiral theories. **80c:35006**
Hainzl, J. Über die Gestalt von gruppeninvarianten linearen partiellen Differentialoperatoren. **80a:35007**
Hamitova, R. S. A basis of conservation laws for the equations of mechanics. (Russian) **80m:35003**
Karlukovski, V. I. *See* **Enikova, M. M.; et al., 80c:35006**
Salogub, V. A. (*with* Sokur, L. P.) The group properties of a system of first-order Poincaré-invariant differential equations. (Russian. English summary) **80h:35002**
Salugub, V. A. (*with* Sokur, L. P.) The group properties of some Galilei-invariant

Takano, Kyoichi A reduction theorem for a linear Pfaffian system with regular singular points. **(80i:58005)**

Tenenblat, Keti (*with* Terng, Chuu Lian) A higher dimension generalization of the sine-Gordon equation and its Bäcklund transformation. **(80b:35129)**

Terng, Chuu Lian *See* **Tenenblat, Keti, (80b:35129)**

(Tzitzéica, G.) *See* **Vrînceanu, Gheorghe, (80i:01013)**

Vinogradov, A. M. The theory of higher infinitesimal symmetries of nonlinear partial differential equations. (Russian) **(80m:58045)**

Vrînceanu, Gheorghe Tzitzéica fondateur de la géométrie centro-affine. **(80i:01013)**

Zilno, G. Chirality invariance and "chiral" fields. **(80a:81052)**

35A35 Theoretical approximation to solutions

Bjalimov, I. The difference method for the solution of a mixed boundary value problem for an equation of elliptic type with singular coefficients. (Russian. Turkmen summary) **80g:35008**

Burgers, J. M. On some problems of homogenization. **80i:35006**

Tartar, L. Une nouvelle méthode de résolution d'équations aux dérivées partielles non linéaires. **80c:35007**

Secondary classifications:

Kodama, Yuji (*with* Taniuti, Tosiya) Higher order approximation in the reductive perturbation method. III. The weakly dissipative system. **(80i:35160)**

Kupradze, V. D. On the question of the solution of exterior problems of electrodynamics. (Russian) **(80a:78008)**

Shirali, Satish Uniform convergence of an approximate method for elliptic quasilinear boundary value problems—a report. **(80e:65104)**

Taniuti, Tosiya *See* **Kodama, Yuji, (80i:35160)**

35A40 Numerical approximation to solutions {For numerical analysis, see 65Mxx, 65Nxx, 65P05.}

Colton, David The approximation of solutions to the backwards heat equation by solutions of pseudoparabolic equations. **80i:35007**

35A99 None of the above, but in this section

Borcea, Ciprian Sorin Quasilinear analytic partial differential equations in involution. (Romanian. French summary) **80h:35003**

Creangă, Ion Sur l'équation: $Dy = F(x, y) \cdot Dx$ dans une algèbre réelle. **80f:35006**

Secondary classifications:

Arls, Rutherford ★Mathematical modelling techniques. **(80b:00008)**

Barbašin, E. A. ★Метод сечений в теории динамических систем. (Russian) [Method of sections in the theory of dynamical systems] **(80i:34067)**

Bellman, Richard E. A new method for treating a class of nonlinear partial differential equations. **(80f:65126)**

Bony, Jean-Michel Hyperfonctions et équations aux dérivées partielles (d'après M. Sato, T. Kawai et M. Kashiwara). **(80i:58035)**

(Gary, John) *See* **Gustafsson, Bertil, (80m:65082)**

Gustafsson, Bertil Comment on: "On boundary conditions for hyperbolic difference schemes" [J. Comput. Phys. **26** (1978), no. 3, 339–351; MR **58** #13765] by John Gary. **(80m:65082)**

Kapitanskiĭ, L. V. *See* **Vakulenko, A. F., (80i:81045)**

Livšic, M. S. The inverse problem for the characteristic functions of several commuting operators. **(80i:47015)**

Operator waves in Hilbert space and related partial differential equations. **(80j:47022)**

Ludwig, Klaus Differenzierbare Funktionen auf kompakten metrischen Räumen. **(80b:58012)**

Vakulenko, A. F. (*with* Kapitanskiĭ, L. V.) Stability of solitons in S^2 of a nonlinear σ-model. (Russian) **(80i:81045)**

35Bxx Qualitative properties of solutions

Secondary classifications:

Thom, René Sur certains aspects qualitatifs de la théorie des équations aux dérivées partielles. **(80j:58068)**

35B05 Comparison theorems; oscillation, zeros and growth of solutions

Allegretto, Walter Spectral estimates and oscillations of singular differential operators. **80d:35009**

Chiti, Giuseppe Orlicz norms of the solutions of a class of elliptic equations. (Italian. English summary) **80h:35004**

Heywood, John G. (*with* Noussair, E. S.; Swanson, C. A.) On the zeros of solutions of elliptic inequalities in bounded domains. **80a:35008**

Kitamura, Yuichi (*with* Kusano, Takaši) Nonlinear oscillation of a fourth-order elliptic equation. **80d:35010**

Kusano, Takaši *See* **Kitamura, Yuichi, 80d:35010**

Moss, William F. (*with* Piepenbrink, John) Positive solutions of elliptic equations. **80b:35008**

Müller-Pfeiffer, E. Kriterien für die Oszillation von elliptischen Differentialgleichungen höherer Ordnung. **80j:35005**

Naito, Manabu (*with* Yoshida, Norio) Oscillation theorems for semilinear elliptic differential operators. **80f:35007**

Narita, Mamoru (*with* Yoshida, Norio) Oscillation theorems for linear ultrahyperbolic operators. **80c:35007**

systems of differential equations. (Russian. English summary) **80i:35005**

Sedenko, V. I. The normal form of nonlinear partial differential equations on the real axis. (Russian) **80b:35006**

Segeda, Ju. N. The symmetry group of Sobolev's equation. (Russian. English summary) **80g:35007**

Sokur, L. P. *See* **Salogub, V. A., 80b:35002** *and* **Salugub, V. A., 80i:35005**

Strampp, W. Zur Lösung von partiellen Differentialgleichungen mit Hilfe von Transformationsgruppen. **80k:35007**

Velčev, C. I. *See* **Enikova, M. M.; et al., 80c:35006**

Zeman, Marvin On the generalized Levi condition for partial differential operators with double characteristics. **80f:35005**

Secondary classifications:

Ablowitz, Mark J. (*with* Satsuma, J.) Solitons and rational solutions of nonlinear evolution equations. **(80b:35121)**

Anderson, Robert L. (*with* Ibragimov, N. H.) ★Lie-Bäcklund transformations in applications. **(80e:58048)**

Barut, A. O. Space-like states in relativistic quantum theory. **(80a:83030)**

Basili, C. *See* **Etim, E., (80a:80012)**

Dorodnicyn, V. A. Group properties and invariant solutions of an equation of nonlinear heat transport with a source or a sink. (Russian. English summary) **(80e:80004)**

Dubovoĭ, V. K. Open fields that are associated with the Duffin equation for scalar particles. (Russian) **(80c:47015)**

Etim, E. (*with* Basili, C.) On the contact transformations of nonequilibrium thermodynamic Hamiltonian. **(80a:80012)**

Fuščič, V. I. (*with* Nikitin, A. G.) Group properties of Maxwell equations. (Russian. English summary) **(80e:78006)**

Gardner, Robert B. Constructing Bäcklund transformations. **(80k:58007)**

Hainzl, J. Separation of variables and commuting operators. **(80k:35016)**

Hamamoto, Shinji Invariant theoretical consideration on the nonlinear realization of general covariance group. **(80a:83033)**

Ibragimov, N. H. On the theory of groups of Lie-Bäcklund transformations. (Russian) **(80h:58059)**

See also **Anderson, Robert L., (80e:58048)**

Ivanov, E. A. (*with* Kapustnikov, A. A.) General relationship between linear and nonlinear realisations of supersymmetry. **(80a:83050)**

Kakié, Kunio Algebraic structures of characteristics in involutive systems of non-linear partial differential equations. **(80b:58007)**

Kapitanskiĭ, L. V. Group analysis of the Navier-Stokes and Euler equations in the presence of rotation symmetry and new exact solutions to these equations. (Russian) **(80g:35104)**

Kapustnikov, A. A. *See* **Ivanov, E. A., (80a:83050)**

Kaul, C. N. One-dimensional, nonlinear wave motion. (French and German summaries) **(80f:35072)**

Kazakov, D. I. (*with* Pervušin, V. N.; Puškin, S. V.) Invariant renormalization for theories with nonlinear symmetry. (Russian. English summary) **(80h:81056)**

Khalil, M. A. K. (*with* Seetharaman, M.) Fisk-Tait equation for spin-3/2 particles. **(80c:81137)**

Kosmann-Schwarzbach, Yvette Sur les transformations de similitude des équations aux dérivées partielles. (English summary) **(80d:58073)**

Kuz'min, E. N. The general anamorphism problem. (Russian) **(80m:65091)**

McCarthy, Patrick J. Existence of strong Bäcklund transformations in four or more dimensions and generalization of a family of Bäcklund transformations. **(80a:81025)**

Motylev, L. Ju. Transformation of the system of Maxwell equations in an inhomogeneous medium to an equation on the rotation group. (Russian. English summary) **(80k:78012)**

Nakamura, Akira Bäcklund transform and conservation laws of the Benjamin-Ono equation. **(80m:35068)**

Nikitin, A. G. The invariance group of the Kemmer-Duffin-Petiau equation for a particle with anomalous moment. (Russian. English summary) **(80f:81049)**

See also **Fuščič, V. I., (80e:78006)**

Nishijima, Kazuhiko (*with* Okawa, Masanori) The Becchi-Rouet-Stora transformation for the gravitational field. **(80a:83027)**

Okawa, Masanori *See* **Nishijima, Kazuhiko, (80a:83027)**

Onufrïčuk, S. P. The symmetry groups of Majorana equations. (Russian. English summary) **(80g:81076a)**

See also **Sokur, L. P., (80g:81076b)**

Osborne, Anthony (*with* Stuart, Allan E. G.) On the separability of the sine-Gordon equation and similar quasilinear partial differential equations. **(80b:35126)**

Pervušin, V. N. *See* **Kazakov, D. I.; et al., (80h:81056)**

Puškin, S. V. *See* **Kazakov, D. I.; et al., (80h:81056)**

Redčenko, G. A. *See* **Segeda, Ju. N., (80f:81044)**

Salogub, V. A. The group properties of Lévy-Leblond equations. (Russian. English summary) **(80j:81030)**

Satsuma, J. *See* **Ablowitz, Mark J., (80b:35121)**

Seetharaman, M. *See* **Khalil, M. A. K., (80c:81137)**

Segeda, Ju. N. (*with* Redčenko, G. A.) The invariance of the equations of Newtonian mechanics with respect to transformation of the Schrödinger group. (Russian. English summary) **(80f:81044)**

Senašov, S. I. Group classification of the equations of ideal plasticity of inhomogeneous bodies. (Russian) **(80a:73032)**

Sokur, L. P. (*with* Onufrïčuk, S. P.) Additional symmetry of the generalized Bargmann-Wigner equation with proper time. (Russian. English summary) **(80g:81076b)**

Stražev, V. I. Dual symmetry of the vector field of general type. (Russian. English summary) **(80a:81038)**

Stuart, Allan E. G. *See* **Osborne, Anthony, (80b:35126)**

Suhinin, S. V. A group property and conservation laws of an equation of transonic motion of a gas. (Russian) **(80h:76037)**

Noussair, E. S. *See* **Heywood, John G.; et al., 80a:35008**
Pagan, Gordon (*with* Stocks, David) Oscillation criteria for second order hyperbolic initial value problems. **80k:35008**
Piepenbrink, John *See* **Moss, William F., 80b:35008**
Schröder, Johann Two-sided bounds and norm bounds for systems of nonlinear differential equations. **80b:35009**
Stocks, David *See* **Pagan, Gordon, 80k:35008**
Swanson, C. A. *See* **Heywood, John G.; et al., 80a:35008**
Yoshida, Norio An oscillation theorem for characteristic initial value problems for nonlinear hyperbolic equations. **80l:35008**
See also **Narita, Mamoru, 80c:35007** *and* **Naito, Manabu, 80f:35007**

Secondary classifications:

Bandle, Catherine (*with* Marcus, Moshe) Un théorème de comparaison pour un problème elliptique avec une non-linéarité singulière. (English summary) **(80i:35075)**
Calogero, F. Motion of poles and zeros of special solutions of nonlinear and linear partial differential equations and related "solvable" many-body problems. (Italian and Russian summaries) **(80a:58023)**
Chipot, Michel Some results about an elastic-plastic torsion problem. **(80d:73058)**
Lakshmikantham, V. (*with* Vaughn, Randy) Reaction-diffusion inequalities in cones. **(80j:35049)**
Marcus, Moshe *See* **Bandle, Catherine, (80i:35075)**
Swanson, C. A. Semilinear second-order elliptic oscillation. **(80k:35028)**
Vaughn, Randy *See* **Lakshmikantham, V., (80j:35049)**

35B10 Periodic solutions

Alymkulov, K. *See* **Imanaliev, M. I., 80j:35006**
Amann, Herbert Periodic solutions of semilinear parabolic equations. **80a:35009**
Baizaev, S. Periodic solutions of a nonlinear generalized Cauchy-Riemann system. (Russian. Tajiki summary) **80m:35004**
Fučík, Svatopluk *See* **Šťastnová, Věnceslava, 80h:35007**
Hecquet, Gérard Sur la recherche des solutions périodiques en x du système: $u_x = f(x, y, u, v)$, $v_y - (\Lambda(x)/y)v = g(x, y, u, v, v_x)$. (English summary) **80m:35005**
Hess, Peter *See* **Schoenenberger-Deuel, Johanna, 80a:35010**
Imanaliev, M. I. (*with* Alymkulov, K.) The existence of periodic solutions of nonlinear wave equations. (Russian) **80j:35006**
Kirchgässner, Klaus Periodic solutions of semilinear elliptic equations in a strip. **80c:35008**
Klimperová, Nina Periodic solutions to the inhomogeneous sine-Gordon equation. **80h:35005**
Louhivaara, Ilppo Simo (*with* Simader, Christian G.) Über periodische Lösungen koerzitiver linearer partieller Differentialgleichungen. **80h:35006**
Mancini, Giovanni Periodic solutions of some semilinear autonomous wave equations. (Italian summary) **80g:35009**
Schoenenberger-Deuel, Johanna (*with* Hess, Peter) Nonlinear parabolic boundary value problems with upper and lower solutions. **80a:35010**
Simader, Christian G. *See* **Louhivaara, Ilppo Simo, 80h:35006**
Šťastnová, Věnceslava (*with* Fučík, Svatopluk) Weak periodic solutions of the boundary value problem for nonlinear heat equations. (Czech and Russian summaries) **80h:35007**
Steuerwalt, Michael The existence, computation, and number of solutions of periodic parabolic problems. **80d:35011**
Ts'ai, Lung I Periodic solutions of parabolic equations with functional arguments. **80b:35010**
Umbetžanov, D. U. Almost multiperiodic solution of a hyperbolic system of differential equations. (Russian. Kazakh summary) **80c:35009**

Secondary classifications:

Konjaev, Ju. A. Asymptotic representation of periodic solutions of certain elliptic equations of order $2m$ in the process $m \to \infty$. (Russian) **(80c:35031)**
Milla Miranda, Manuel Homogénéisation d'un problème hyperbolique périodique avec conditions aux limites mixtes. (English summary) **(80d:35089)**
Nikolenko, N. V. Perturbations of the Korteweg-de Vries equation. (Russian) **(80a:35105)**
Poliščuk, V. N. (*with* Ptašnik, B. I.) The periodic boundary value problem for a system of hyperbolic equations with constant coefficients. (Russian) **(80b:35100)**
Ptašnik, B. I. *See* **Poliščuk, V. N., (80b:35100)**
Rabinowitz, Paul H. A variational method for finding periodic solutions of differential equations. **(80b:34043)**
Štědrý, M. Concerning Cesari's theorems. **(80f:47057)**

35B15 Almost periodic solutions

Beržanov, A. B. *See* **Umbetžanov, D. U., 80m:35006**
Moseĕenkov, V. B. Quasiperiodic solutions of nonlinear hyperbolic equations with damping. (Russian) **80f:35008**
Norando, Tullia The almost periodic solution of a variational inequality with an almost periodic obstacle. (Italian. English summary) **80f:35009**
Umbetžanov, D. U. (*with* Beržanov, A. B.) Holomorphic almost multiperiodic solution of a certain integro-partial differential equation. (Russian. Kazakh summary) **80m:35006**
★Почти многопериодические решения дифференциальных уравнений в частных производных. (Russian) [Almost multiperiodic solutions of partial differential equations] **80h:35008**
Vul'pe, I. M. The determination of periodic solutions of nonlinear systems by the averaging method. (Russian) **80a:35011**
Yamaguchi, Masaru Almost periodic solutions of undamped linear wave equations. **80i:35009**

Secondary classifications:

Arnuajon, Paul Solutions presque périodiques d'une équation différentielle opérationnelle. **(80d:34079)**

35B20 Perturbations

Tartar, L. Estimation de coefficients homogénéisés. **80i:35010**

Secondary classifications:

Anikin, A. A. (*with* Popykin, A. I.; Šihov, S. B.) The stability of the solution of the spectral problem for a multi-group diffusion approximation of the transport equation. (Russian) **(80b:82059)**
Benzinger, Harold E. Perturbation of the heat equation. **(80d:35067)**
Ipser, James R. (*with* Semenzato, Roberto) A connection between stability and the nonexistence of unstable proper normal modes for certain classes of perturbations of gravitating systems. **(80d:83012)**
Popykin, A. I. *See* **Anikin, A. A.; et al., (80b:82059)**
Semenzato, Roberto *See* **Ipser, James R., (80d:83012)**
Šihov, S. B. *See* **Anikin, A. A.; et al., (80b:82059)**

35B25 Singular perturbations

Alihanova, R. I. A singular perturbation of a boundary value problem for a quasilinear elliptic equation with discontinuous coefficients. (Russian) **80e:35003**
Arms, Judith M. Linearization stability and a globally singular change of variables. **80m:35007a**
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Baranger, J. On the thickness of the boundary layer in elliptic singular perturbation problems. **80m:35008**
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Cocilte, Mario M. Singular perturbations for a quasi-elliptic problem with constant coefficients in a half-space. (Italian. English summary) **80c:35010**
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Devinatz, Allen (*with* Friedman, Avner) The asymptotic behavior of the solution of a singularly perturbed Dirichlet problem. **80l:35011**
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Frank, Leonid S. Singular elliptic perturbations. (Italian. English summary) **(80j:35030)**
Gribben, R. J. *See* **Parkes, E. J., (80b:76045)**
Huet, Denise Approximation d'un espace de Banach et perturbations singulières. (English summary) **(80i:41031)**
Kamin, Shoshana Elliptic perturbation of a first-order operator with a singular point of attracting type. **(80h:35044)**
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35B30 Dependence of solutions on initial and boundary data, parameters

Attouch, Hédy Convergence des solutions d'inéquations variationnelles avec obstacle. **80g:35010**
Borodin, A. V. An estimate for second-order partial differential equations and its application. (Russian) **80d:35012**
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35B32 Bifurcation

Alinhac, S. L. Branching of singularities for a class of hyperbolic operators. **80f:35012**

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35B35 Stability, boundedness

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d'Anna, Armando (*with* Maio, Alfonso; Monte, Anna-Maria) Stability questions for boundary value problems. **80c:35011**

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35B37 Control [See also 49–XX, 93–XX.]

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35B40 Asymptotic behavior of solutions

Aronson, D. G. (*with* Weinberger, H. F.) Multidimensional nonlinear diffusion arising in population genetics. **80a:35013**

Arosio, Alberto Asymptotic behavior as $t \to +\infty$ of solutions of linear parabolic equations with discontinuous coefficients in a bounded domain. **80f:35015**

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Weinberger, H. F. *See* **Aronson, D. G., 80a:35013**

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Bloom, Frederick Remarks on the asymptotic behavior of solutions to damped evolution equations in Hilbert space. **(80f:34054)**

Chaljub-Simon, Alice (*with* Choquet-Bruhat, Yvonne) Solutions asymptotiquement euclidiennes de l'équation de Lichnerowicz. (English summary) **(80b:58022)**

Choquet-Bruhat, Yvonne *See* **Chaljub-Simon, Alice, (80b:58022)**

Chueh, Kai Nan A compact positively invariant set of solutions of the Nagumo equation. **(80d:35134)**

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Velo, Giorgio *See* **Ginibre, Jean, (80c:35025)**

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35B45 A priori estimates

Acker, Andrew Isoperimetric inequalities involving heat flow—the case of a one-sided linear radiation condition. (German summary) **80b:35024**

Albinus, Günter Uniform estimates in maximum norms and uniqueness of solutions of the Dirichlet problem. **80m:35012**

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de Figueiredo, Djairo G. (*with* Lions, Pierre-Louis; Nussbaum, Roger D.) Estimations a priori pour les solutions positives de problèmes elliptiques superlinéaires. (English summary) **80m:35013**

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Lions, Pierre-Louis *See* **de Figueiredo, Djairo G.; et al., 80m:35013**

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Ughi, Maura A priori estimates for the solutions of boundary value problems of fourth and fifth type for a linear parabolic equation. (Italian. English summary) **80f:35022**

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Tahvelidze, I. N. *See* **Oleĭnik, O. A.; et al., (80b:35057)**
Villaggio, Piero Concavity techniques with application to shock problems. **(80d:73085)**
Widman, K.-O. *See* **Fabes, E. B.; et al., (80h:35072)**

35B50 Maximum principles

Granlund, Seppo Strong maximum principle for a quasi-linear equation with applications. **80a:35017**
Himčenko, B. N. *See* **Kamynin, L. I., 80i:35023** *and* **Kamynin, L. I., 80i:35024**
Kamynin, L. I. (*with* Himčenko, B. N.) An isotropic strict extremum principle in a planar domain. (Russian) **80i:35023**
(*with* Himčenko, B. N.) The strict extremum principle for a D-(Φ, Ω)-elliptically connected second-order operator. (Russian) **80i:35024**
Kupcov, L. P. The mean value property and the maximum principle for second order parabolic equations. (Russian) **80a:35018**

Secondary classifications:

Gidas, Basilis (*with* Ni, Wei Ming; Nirenberg, Louis) Symmetry and related properties via the maximum principle. **(80h:35043)**
Goyal, V. B. (*with* Singh, K. P.) Maximum principles for a certain class of semilinear elliptic partial differential equations. **(80g:35048a)**
Himčenko, B. N. *See* **Kamynin, L. I., (80g:35064)**
Kamynin, L. I. (*with* Himčenko, B. N.) A strict extremum principle for a weakly elliptically connected second-order operator. (Russian) **(80g:35064)**
Ni, Wei Ming *See* **Gidas, Basilis; et al., (80h:35043)**
Nirenberg, Louis *See* **Gidas, Basilis; et al., (80h:35043)**
Philippin, Gérard A. A minimum principle for the problem of torsional creep. **(80f:73042)**
Singh, K. P. *See* **Goyal, V. B., (80g:35048a)**
Stoker, J. J. Uniqueness theorems for some open and closed surfaces in three-space. **(80g:53047)**

35B60 Continuation and prolongation [See also 58A15, 58A17, 58Hxx.]

Secondary classifications:

Rhee, H. *See* **Walter, Wolfgang, (80i:35074)**
Walter, Wolfgang (*with* Rhee, H.) Entire solutions of $\Delta^p u = f(r, u)$. **(80i:35074)**

35B65 Smoothness of solutions

35B99 None of the above, but in this section

Aronson, D. G. A comparison method for stability analysis of nonlinear parabolic problems. **80c:35014**
Baklanovskaja, V. F. A method for investigating the behavior of the difference of two solutions of nonlinear differential equations. (Russian) **80d:35021**
Èĭdus, D. M. *See* **Vinnik, A. A., 80g:35019**
Haimovici, Adolf On invariant solutions of some hyperbolic partial differential equations. **80d:35022**
Homa, G. P. Partial averaging in hyperbolic systems of the standard type. (Russian) **80h:35017**
Simionescu, Claudia Lidia Note on a differential inequality. (Romanian summary) **80i:35025**
Vinnik, A. A. (*with* Èĭdus, D. M.) The principle of limit amplitude for domains of paraboloid type. (Russian) **80g:35019**

Secondary classifications:

Berdičevskiĭ, V. L. On averaging of periodic systems. **(80e:73008)**
Chiriță, S. Saint-Venant's problem for nonlocal elastic solids. **(80c:73012)**
Džordžadze, G. P. (*with* Pogrebkov, A. K.; Polivanov, M. K.) Singular solutions of the equation $\Box\varphi + (m^2/2)\exp\varphi = 0$ and the dynamics of singularities. (Russian. English summary) **(80j:81058)**
Eltayeb, I. A. (*with* Kandaswamy, P.) Critical levels in a vertically rotating compressible atmosphere. **(80i:86006)**
Gorodcov, V. A. Self-similarity and weak closing relations for symmetric free turbulence. (Russian) **(80f:76019)**
Homa, G. P. *See* **Mitropol'skiĭ, Ju. O., (80j:35065)**
Ivriĭ, V. Ja. Nonclassical propagation of singularities for the solution of a wave equation near the boundary. (Russian) **(80j:35059)**
Propagation of singularities of solutions of nonclassical boundary value problems for the wave equation. (Russian) **(80j:35060)**
Janovský, Vladimír Regularity of mildly nonlinear variational inequalities. (Italian summary) **(80e:49006)**
Kandaswamy, P. *See* **Eltayeb, I. A., (80i:86006)**
Kazarjan, G. G. Inequalities for differential polynomials with variable coefficients. (Russian) **(80j:35020)**
Krishna Prasad, K. *See* **Venkateshan, S. P., (80b:76025)**
Lakshmikantham, V. (*with* Vaughn, Randy) Reaction-diffusion inequalities in cones. **(80j:35049)**
Matkowsky, Bernard J. (*with* Sivašinskiĭ, G. I.) Acceleration effects on the stability of flame propagation. **(80g:80005)**
(*with* Sivašinskiĭ, G. I.) An asymptotic derivation of two models in flame theory associated with the constant density approximation. **(80g:80006)**
Meier, Michael Liouville theorems for nonlinear elliptic equations and systems. **(80m:35024)**
Mitropol'skiĭ, Ju. O. (*with* Homa, G. P.) Averaging methods for hyperbolic systems with fast and slow variables. A mixed problem. (Russian) **(80j:35065)**
Moore, D. W. The spontaneous appearance of a singularity in the shape of an evolving vortex sheet. **(80b:76006)**
Naas, Josef (*with* Tutschke, Wolfgang) Some probabilistic aspects in partial complex differential equations. (Russian summary) **(80b:35060)**
Ness, John C. Chemical waves and the diffusive coupling of limit cycle oscillators. **(80f:80008)**
Nikunen, M. Selfadjoint diffusion processes with rapidly oscillating coefficients. (Russian. English summary) **(80g:60081)**
Pelczar, Andrzej A local version of the generalized retract theorem of Ważewski with applications in the theory of partial differential equations of first order. **(80i:54050)**
Pogrebkov, A. K. *See* **Džordžadze, G. P.; et al., (80j:81058)**
Polivanov, M. K. *See* **Džordžadze, G. P.; et al., (80j:81058)**
Serre, Denis Prolongement analytique et nombre de solutions d'une équation aux dérivées partielles elliptique non linéaire paramétrée. (English summary) **(80m:35052)**
Sivašinskiĭ, G. I. *See* **Matkowsky, Bernard J., (80g:80005)** *and* **Matkowsky, Bernard J., (80g:80006)**
Stork, Werner Regularity and decay of eigenfunctions. **(80a:35100)**
Swanson, C. A. Wirtinger's inequality. **(80a:35036)**
Tutschke, Wolfgang *See* **Naas, Josef, (80b:35060)**
Tvorogov, V. B. A sharp front and singularities of the solutions of a class of nonhyperbolic equations. (Russian) **(80g:35034)**
Vaughn, Randy *See* **Lakshmikantham, V., (80j:35049)**
Venkateshan, S. P. (*with* Krishna Prasad, K.) Radiative interactions in boundary layers. **(80b:76025)**

35Cxx Representations of solutions

Secondary classifications:

Čerevko, M. O. *See* **Guz', O. M.; et al., (80h:73027)**
Goerke, Herbert ★Asymptotische Methoden zur Lösung von Differentialgleichungen. **(80c:34060)**
Guz', O. M. (*with* Kubenko, V. D.; Čerevko, M. O.) ★Дифракция упругих волн. (Russian) [Diffraction of elastic waves] **(80h:73027)**
Kubenko, V. D. *See* **Guz', O. M.; et al., (80h:73027)**
Ulitko, A. F. ★Метод собственных векторных функций в пространственных задачах теории упругости. (Russian) [The method of eigenvector functions in three-dimensional problems of the theory of elasticity] **(80h:73003)**

35C05 Solutions in closed form

Belocerkovskiĭ, O. M. (*with* Mitnickiĭ, V. Ja.) Some exact solutions of the problem of a magnetic dipole surrounded by an infinitely conducting fluid. (Russian) **80f:35016**
Burt, Philip B. Exact solutions of nonlinear generalizations of the Klein-Gordon and Schrödinger equations. **80g:35020**
Case, K. M. Meromorphic solutions of the Benjamin-Ono equation. **80i:35026**
Lanckau, Eberhard Explizite Lösungen für Rand- und Anfangswertaufgaben bei Gleichungen gemischten Typs mit drei unabhängigen Veränderlichen. **80i:35027**
Lax, M. Analytic solution of a model pulse propagation problem. **80c:35015**
Makarov, I. A. Solution of the Cauchy-Goursat problem for an equation with two lines of degeneracy of the second kind. (Russian) **80i:35028**
Mitnickiĭ, V. Ja. *See* **Belocerkovskiĭ, O. M., 80f:35016**
Nesterov, S. V. Examples of nonlinear Klein-Gordon equations that are solvable in elementary functions. (Russian) **80h:35018**
Pasquini, Lionello Construction of systems of linear and homogeneous partial differential equations (in two variables) that have a prescribed linear manifold of solutions. (Italian. English summary) **80a:35019**
Šapkarev, Ilija A. Polynome vom Grad n als vollständige Integrale der allgemeinen linearen partiellen Differentialgleichungen der Ordnung n. (Macedonian summary) **80c:35016**
Suleĭmanov, A. Š. A class of exact solutions of the wave equation in cylindrical coordinates. (Russian) **80h:35019**

Secondary classifications:

Belinskiĭ, V. A. (*with* Zaharov, V. E.) Integration of the Einstein equations by means of the inverse scattering problem technique and construction of exact soliton solutions. **(80h:83009)**
Bhowmick, J. B. Some exact analytic self-similar solutions in the theory of flare-ups in novae. **(80b:85009)**
Choodnovsky, Gregory V. *See* **Chudnovsky, David V., (80j:81034)**
Chudnovsky, David V. (*with* Choodnovsky, Gregory V.) Multisoliton formula for completely integrable two-dimensional systems. **(80j:81034)**
Dumkina, G. V. (*with* Kozmanov, M. Ju.) The exact solution of a nonlinear system of equations for the energy and nonstationary radiation transport. (Russian) **(80g:80003)**
Enikova, M. M. (*with* Karlukovski, V. I.) Exact solutions in field theory. (Russian summary) **(80k:81126)**
(*with* Karlukovski, V. I.; Velčev, C. I.) Exact finite-energy solutions in non-linear $SU(2)\times SU(2)$ and $SU(2)\times SU(1, 1)$ chiral theories. **(80c:35006)**
Jakimova, K. E. Integration of Poincaré-Četaev equations. (Russian. English summary) **(80b:70024)**
Karlukovski, V. I. *See* **Enikova, M. M.; et al., (80c:35006)** *and* **Enikova, M. M., (80k:81126)**
Kečkić, Jovan D. On some classes of linear equations. **(80a:39010)**
Kozmanov, M. Ju. *See* **Dumkina, G. V., (80g:80003)**
Krasil'ščikova, E. A. Potential field induced by an acoustical wave incident upon a moving plane. **(80b:76033)**
Lanckau, Eberhard Bergmansche Integraloperatoren für dreidimensionale Gleichungen und Gleichungssysteme. **(80h:35024a)**
Bergmansche Integraloperatoren für dreidimensionale Gleichungen. II. **(80h:35024b)**

Martić, Branislav On some systems of partial differential equation and on some classes of nonanalytic functions. (Serbo-Croatian summary) **(80f:35079)**

Moussiaux, A. (*with* Ronveaux, André) Electrostatic capacity of two unequal adhering spheres. **(80b:78004)**

Myint-U, Tyn An alternative method on complete integrals of plane eikonal equations. **(80d:70049)**

Ôtsu, Tôzaburô (*with* Watanabe, Tadashi) Generating functions of two-time Green functions for some simple systems. **(80h:81035)**

Pit'ev, N. P. Coefficients of the gradient of the direction field in systems that permit separation of variables. (Russian. English summary) **(80k:70015)**

Ronveaux, André *See* **Moussiaux, A., (80b:78004)**

Velčev, C. I. *See* **Enikova, M. M.; et al., (80c:35006)**

Watanabe, Tadashi *See* **Ôtsu, Tôzaburô, (80h:81035)**

Zaharov, V. E. *See* **Belinskiĭ, V. A., (80h:83009)**

35C10 Series solutions, expansion theorems

Babin, A. V. Expressing the solution of a differential equation in terms of iterations of differential operators. (Russian) **80b:35025**

Bogaenko, I. N. (*with* Timofeev, Ju. A.) Questions on improving the convergence of series in the solution of the Poisson equation. (Russian) **80j:35012**

Bondarenko, B. A. (*with* Suleĭmanov, A. S.) Polywave quasipolynomial functions and their applications to certain problems of oscillation theory. (Russian) **80l:35029**

Kelman, Robert B. Least squares Fourier series solutions to boundary value problems. **80f:35017**

Martić, Branislav A remark on partial differential equations which are in connection with nonanalytic functions. (Serbo-Croatian summary) **80h:35020**

On some solutions of partial differential equations. (Serbo-Croatian summary) **80h:35021**

McCoy, Peter A. Mean boundary value problems for a class of elliptic equations in E^3. **80j:35013**

Mokeičev, V. S. Independence of the solution of boundary value problems from the fundamental basis. Selfadjointness of some problems. (Russian) **80h:35022**

Nikolaev, B. G. An approach to the solution of problems in the case of asymmetric ring domains. (Russian. English summary) **80g:35021**

Nowak, Zenon Series solution to the Dirichlet problem for the semilinear equation $\Delta^k u = f$ on a disc. I. Iterative method. (Russian summary) **80f:35018a**

Series solution to the Dirichlet problem for the semilinear equation $\Delta^k u = f$ on a disc. II. Approximate techniques. (Russian summary) **80f:35018b**

Paĭkovskiĭ, V. I. A problem of temperature distribution in ribbed bodies. (Russian) **80f:35019**

Safonov, V. F. Solvability of a problem in the nonlinear theory of the regularization method in the class of uniformly convergent series. (Russian) **80f:35020**

Suleĭmanov, A. S. *See* **Bondarenko, B. A., 80l:35029**

Sultangazin, U. M. Solution of symmetric positive systems of differential equations. **80e:35009**

Tao, L. N. Free boundary problems with radiation boundary conditions. **80f:35021**

Timofeev, Ju. A. *See* **Bogaenko, I. N., 80j:35012**

Titov, S. S. Expansion of the solutions of nonlinear equations into double series. (Russian) **80d:35023**

Urabe, Jiichiroh On the theorem of Hamada for a linear second-order equation with variable multiplicities. **80f:35022**

Vasilache, Sergiu Algebraic method for solving linear partial differential equations with variable coefficients. II. Fundamental solutions. **80j:35014**

Secondary classifications:

Ahner, John F. The exterior Robin problem for the Helmholtz equation. **(80a:35031)**

Grudo, È. I. Analogues of the fundamental theorems of the first method of Ljapunov for Pfaffian systems. (Russian) **(80k:35010)**

Lokšin, A. A. (*with* Rok, V. E.) Self-similar solutions of wave equations with time delay. (Russian) **(80h:35124)**

Longdon, L. W. (*with* Parfitt, Amanda M.) Finite integral transforms and the control of distributed parameter systems. **(80g:35024)**

Mošinskiĭ, A. V. Construction of a scalar Green function for a rectangular waveguide by means of Mathieu functions. (Russian) **(80h:78012)**

Okamoto, Kazuo Sur la convergence de solutions formelles d'équations différentielles avec singularités de première classe. **(80k:58009)**

Parfitt, Amanda M. *See* **Longdon, L. W., (80g:35024)**

Rao, C. R. A. Wave propagation in elastic media with prescribed variation in the parameters. **(80g:73030)**

Rok, V. E. *See* **Lokšin, A. A., (80h:35124)**

Scheidl, W. (*with* Ziegler, F.) Interaction of a pulsed Rayleigh surface wave and a rigid cylindrical inclusion. **(80f:73030)**

Ziegler, F. *See* **Scheidl, W., (80f:73030)**

35C15 Integral representations

Albinus, Günter Lösung des Dirichletschen Problems für die polyharmonische Gleichung in dickwandigen Hohlkugeln beliebiger Dimension. **80i:35030**

Bauer, Karl Wilhelm Zur iterierten Gleichung der verallgemeinerten axial-symmetrischen Potentialtheorie. (Russian summary) **80h:35023**

Begehr, Heinrich (*with* Gilbert, Robert P.) Piecewise continuous solutions of pseudoparabolic equations in two space dimensions. **80d:35024**

Ch'én, Wu Yung H^p spaces for solutions of parabolic equations by integral operators. **80b:35026**

Cohen, Jeffrey S. (*with* Papadakis, John S.) An addition formula for Green's functions. **80b:35027**

Colton, David (*with* Wimp, Jet) The construction of solutions to the heat equation backward in time. **80k:35011**

Gilbert, Robert P. *See* **Begehr, Heinrich, 80d:35024**

Górowski, Jan On the Dirichlet problem for interior and for exterior of an elliptic domain. **80k:35012**

Kadob'jans'kiĭ, R. M. *See* **Kozak, P. P., 80k:35013**

Koosis, Paul Green's function for the heat equation as a limit of product integrals. **80a:35020**

Kozak, P. P. (*with* Kadob'jans'kiĭ, R. M.) Representation of the solution of a characteristic problem for a system of higher-order linear differential equations in the form of an integral with respect to Wiener measure. (Russian. English summary) **80k:35013**

Kracht, Manfred (*with* Kreyszig, Erwin) Constructive methods for certain Bergman operators. **80b:35028**

Kreyszig, Erwin *See* **Kracht, Manfred, 80b:35028**

Kürcz, Anton Zur Lösung parabolischer Gleichungen und Systeme mittels Integraloperatoren. **80a:35021**

Lanckau, Eberhard Bergmansche Integraloperatoren für dreidimensionale Gleichungen und Gleichungssysteme. **80h:35024a**

Bergmansche Integraloperatoren für dreidimensionale Gleichungen. II. **80h:35024b**

Lowndes, J. S. An application of some fractional integrals. **80b:35029**

Matveev, P. N. Quasipolynomial functions of a vector argument with integral operators. (Russian. English summary) **80c:35018**

Oleksandrovič, Ì. M. Some properties of the integral representation of the solutions of the Helmholtz equation. (Ukrainian. English and Russian summaries) **80c:35017**

Integral representation of the solutions of the Euler-Poisson-Darboux equation. (Russian. English summary) **80h:35030**

Papadakis, John S. *See* **Cohen, Jeffrey S., 80b:35027**

Radžabov, N. R. Elementary solutions and integral representations for a class of differential equations with n singular hyperplanes. (Russian) **80d:35025**

Roach, G. F. On the commutative properties of boundary integral operators. **80e:35010**

Rühs, Fritz Über die Lösung der Potentialgleichung im Halbstreifen durch Integraltransformation. **80h:35025**

Watson, N. A. Positive thermic majorization of temperatures on infinite strips. **80l:35031**

Wimp, Jet *See* **Colton, David, 80k:35011**

Secondary classifications:

de Brucq, Denis *See* **Vasilache, Sergiu, (80b:44010)**

Clements, D. L. *See* **Rogers, C., (80e:73017)**

Colton, David Transformation operators and wave propagation in a spherically stratified medium. **(80d:78029)**

The solution of problems in radiowave propagation by the method of parabolic equations and transformation operators. **(80k:78018)**

Dobruškin, V. A. *See* **Gaĭduk, S. I., (80l:73069)**

Èidel'man, S. D. (*with* Pletn'ova, T. G.) Harnack inequalities, integral representation, and the Fatou theorem for classical positive solutions of parabolic equations with weight $2(2q+1)$. (Russian) **(80k:35071)**

Gaĭduk, S. I. (*with* Dobruškin, V. A.) Solution of a problem in the theory of thermoelasticity related to mechanical and thermal impacts. (Russian) **(80l:73069)**

Gołąb, Jerzy On a certain mixed boundary value problem for iterated Helmholtz equation. **(80a:35037)**

Grimaldi, A. (*with* Neri, Umberto; Ragnedda, F.) On a Cauchy problem (with L^p data) for the square of the heat operator. (Italian summary) **(80c:35046)**

Lewis, Jeff E. Hydrodynamical potentials and parabolic singular integral operators. **(80e:35053)**

Makarov, I. A. Solution of the Cauchy-Goursat problem for an equation with two lines of degeneracy of the second kind. (Russian) **(80e:35044)**

Mattioli, Franco Some integral formulations of the scalar Helmholtz equation. **(80e:35017)**

Neri, Umberto *See* **Grimaldi, A.; et al., (80c:35046)**

Niżnik, L. P. An inverse scattering problem on a nonstationary potential in three-dimensional space. (Russian) **(80l:35145)**

Obermeier, F. On a new representation of aeroacoustic source distribution. I. General theory. (German and French summaries) **(80f:76035a)**

On a new representation of aeroacoustic source distribution. II. Two-dimensional model flows. (German and French summaries) **(80f:76035b)**

Pletn'ova, T. G. *See* **Èidel'man, S. D., (80k:35071)**

Ragnedda, F. *See* **Grimaldi, A.; et al., (80c:35046)**

Rogers, C. (*with* Clements, D. L.) Bergman's integral operator method in inhomogeneous elasticity. **(80e:73017)**

Tutschke, Wolfgang ★Vorlesungen über partielle Differentialgleichungen. **(80l:35002)**

Vasilache, Sergiu (*with* de Brucq, Denis) Sur un problème aux limites pour l'équation de propagation avec perte d'énergie. (English summary) **(80k:44010)**

35C20 Asymptotic expansions

Antonov, A. M. (*with* Bělov, Ju. A.) The behavior of the solutions of a class of nonlinear boundary value problems with a free boundary. (Russian) **80f:35023**

Arya, J. C. (*with* Bojadžiev, G. N.) Response of a nonlinear vibrator governed by a certain partial differential equation. **80d:35026**

Bělov, Ju. A. *See* **Antonov, A. M., 80f:35023**

Bojadžiev, G. N. *See* **Arya, J. C., 80d:35026**

Butuzov, V. F. (*with* Nesterov, A. V.) A singularly perturbed equation of parabolic type. (Russian) **80d:35027**

Dymčenko, V. I. Asymptotic expansions of the solutions of the Helmholtz equation in the neighborhood of angular boundary points. (Russian) **80k:35014**

Grigor'eva, N. S. Short-wave asymptotics of the Green function for an interval. (Russian) **80d:35028**

Grudo, È. I. Representation of fundamental matrices of Pfaffian systems with coefficients that have uniform asymptotic expansions. (Russian) **80l:35032**

Guillot, Jean-Claude (*with* Ralston, James V.) Construction d'ondes de Rayleigh asymptotiques. (English summary) **80b:35031**

Kaljakin, L. A. Construction of the asymptotics of the solutions of a small-parameter magnetohydrodynamic problem. I. Rectilinear flow on a rectangular canal. Superconductive wall perpendicular to the magnetic field. (Russian) **80d:35029**

Lelikova, E. F. The method of matching asymptotic expansions for the equation $\varepsilon\Delta u - au_x = f$ in a parallelepiped. (Russian) **80i:35033**

Lions, Jacques-Louis A remark on certain computational aspects of the homogenization method in composite materials. (Russian) **80h:35026**

Nesterov, A. V. *See* **Butuzov, V. F., 80d:35027**

Pruđkovskiĭ, A. G. The WKB method for a system of Schrödinger equations and the order of its accuracy in the case of characteristics of variable multiplicity. (Russian) **80i:35034**

Ralston, James V. *See* **Guillot, Jean-Claude, 80b:35031**

Šaras, A. L. Asymptotic integration of certain weakly nonlinear partial differential systems. (Russian) **80j:35015**

Weston, Vaughan H. On the asymptotic solution of a partial differential equation with an exponential nonlinearity. **80e:35022**

Zauderer, Erich Asymptotic decomposition of partial differential equations. **80g:35022**

Secondary classifications:

Braun, P. A. WKB-approximation for three-term recurrence relations and quasi-energies of an anharmonic oscillator. (Russian. English summary) **(80b:81020)**

Chakrabarti, Aloknath A direct approach to the problem of diffraction by a half-plane under mixed boundary conditions. (German and Russian summaries) **(80k:35022)**

Christodoulou, Demetrios (*with* Schmidt, B. G.) Convergent and asymptotic iteration methods in general relativity. **(80f:83033)**

Clarlet, Philippe G. Une justification des équations de von Kármán. (English summary) **(80i:73010)**

(*with* Kesavan, Srinivasan) Approximation bidimensionnelle du problème de valeurs propres pour une plaque. (English summary) **(80k:35052)**

Colton, David The approximation of solutions to the backwards heat equation by solutions of pseudoparabolic equations. **(80i:35007)**

(*with* Wimp, Jet) Asymptotic behaviour of the fundamental solution to the equation of heat conduction in two temperatures. **(80h:35079)**

Crighton, D. G. (*with* Scott, J. F.) Asymptotic solutions of model equations in nonlinear acoustics. **(80h:76040)**

Datta, Subhendu K. (*with* El-Akily, Nabil) Diffraction of elastic waves in a half space. I. Integral representations and matched asymptotic expansions. **(80g:73023)**

Eckhaus, Wiktor (*with* Moet, H. J. K.) Asymptotic solutions in free boundary problems of singularly perturbed elliptic variational inequalities. **(80c:49004)**

El-Akily, Nabil *See* **Datta, Subhendu K., (80g:73023)**

Gautesen, A. K. On matched asymptotic expansions for two-dimensional elastodynamic diffraction by cracks. **(80d:73044)**

Ingham, D. B. Flow past a suddenly cooled vertical plate. **(80i:65141)**

Jeffrey, Alan An asymptotic solution for the KdVB monotone shock wave and its generalisation. **(80f:35113)**

Kesavan, Srinivasan *See* **Clarlet, Philippe G., (80k:35052)**

Klass, V. A. (*with* Krasil'nikov, V. N.) On short wave asymptotics of the field reflected from a sphere with a time-dependent radius. (Russian) **(80g:78009)**

Krasil'nikov, V. N. *See* **Klass, V. A., (80g:78009)**

Larsen, Edward W. Two types of homogenization. **(80i:82037)**

Loginov, B. V. Construction of periodic solutions to a three-dimensional problem of waves over an even bottom. (Russian) **(80j:76020)**

Macuk, V. A. (*with* Rykov, V. A.) The Chapman-Enskog method for reacting gas mixtures with different velocities and temperatures. (Russian) **(80c:82031)**

Miles, John W. The asymptotic solution of the Korteweg-deVries equation in the absence of solitons. **(80d:35130)**

Moet, H. J. K. *See* **Eckhaus, Wiktor, (80c:49004)**

Ohayon, Roger Homogénéisation par développements asymptotiques mixtes. Calcul des vibrations de milieux élastiques à structure périodique. (English summary) **(80g:73052)**

Orlov, Ju. I. (*with* Orlova, N. S.) An asymptotic method for the determination of the fields of diffraction of waves by convex bodies of revolution. (Russian. English summary) **(80j:78006)**

Orlova, N. S. *See* **Orlov, Ju. I., (80j:78006)**

Rykov, V. A. *See* **Macuk, V. A., (80c:82031)**

Schmidt, B. G. *See* **Christodoulou, Demetrios, (80f:83033)**

Scott, J. F. *See* **Crighton, D. G., (80h:76040)**

Smith, Ronald Asymptotic solutions of the Erdogan-Chatwin equation. **(80d:76085)**

Tobiska, Lutz Asymptotische Lösung singulär gestörter Probleme. **(80h:35010)**

Wimp, Jet *See* **Colton, David, (80h:35079)**

35C99 None of the above, but in this section

Alimov, A. L. *See* **Berkinov, H. B., 80b:35032**

Babu, D. K. (*with* van Genuchten, M. Th.) A similarity solution to a nonlinear diffusion equation of the singular type: a uniformly valid solution by perturbations. **80h:35027**

Berkinov, H. B. (*with* Alimov, A. L.) Solution of the Cauchy problem for equations that contain products of wave operators by the method of initial functions. (Russian) **80b:35032**

Bischoff, Günther Zur numerischen Lösung von Randwertproblemen partieller Differentialgleichungen elliptischen Typs. **80f:35024**

Carroll, Robert Wayne Transmutation and separation of variables. **80g:35023**

Čebotarev, A. M. Representation of the solution of the Schrödinger equation in the form of a mathematical expectation of the functionals of a jump-like process. (Russian) **80i:35035**

Colton, David The inverse scattering problem for a cylinder. **80k:35015**

Fryant, Allan J. Interpolation and approximation of generalized axisymmetric potentials. **80d:35030**

Galicya, A. S. Expansion, in an infinite domain, of functions in an integral in prolate spheroidal functions and some applications. (Russian) **80h:35028**

van Genuchten, M. Th. *See* **Babu, D. K., 80h:35027**

Hainzl, J. Separation of variables and commuting operators. **80k:35016**

Hoffmann, Andor A remark on generalizing the "method of separation of variables". (Hungarian. English summary) **80e:35019**

Kikuchi, Norio A construction of solutions for a nonlinear differential equation. **80i:35036**

Langebartel, Ray G. Partial separability of the Laplace equation in Roche coordinates. **80b:35033**

Longdon, L. W. (*with* Parfitt, Amanda M.) Finite integral transforms and the control of distributed parameter systems. **80g:35024**

Makarov, I. A. Extension of the applicability of formulas to negative values of parameters of equations with singular coefficients. (Russian) **80f:35025**

Minasjan, R. S. A mixed boundary value problem of heat conduction for a sphere. (Russian. Armenian summary) **80g:35025**

Mošinskiĭ, A. V. Construction of the Green function of the Helmholtz equation for a semi-infinite rectangular domain with the aid of Bessel functions. (Russian) **80b:35034**

Narkun, Z. M. Solution of the Dirichlet problem for the Laplace equation, and structure of its Green function in the case of a plane with N elliptic cuts. (Russian) **80e:35038**

Ngô Văn Lư'o'c Summary representation formulas for a class of equations with variable coefficients. (Russian) **80e:35011**

Summary representation formulas for a class of equations with variable coefficients. (Russian. English summary) **80f:35026**

Orlov, Konstantin The general method for solving the partial differential equation of any order with unknown function depending on any number of arguments and the system of such equations. **80m:35014**

Parfitt, Amanda M. *See* **Longdon, L. W., 80g:35024**

Vasilache, Sergiu Algebraic method for solving linear partial differential equations with variable coefficients. I. Basic theory. **80d:35031**

Secondary classifications:

Ablowitz, Mark J. (*with* Segur, Harvey) On the evolution of packets of water waves. **(80k:76013)**

Adam, J. A. *See* **Craik, A. D. D., (80b:81022a)**

Aleksandrovič, A. I. Use of holomorphic expansion to investigate the equations of dynamic problems of elasticity. **(80m:73026)**

Andrews, M. Vector operators and spherical harmonics in quantum mechanics. **(80b:81015)**

Andriankin, È. I. (*with* Kononenko, M. M.) The solution of a biharmonic problem for an elastic cylinder. (Russian) **(80h:73011)**

Aržanyh, I. S. Quadratic representations of the solutions of the Volterra problem. (Russian. Uzbek summary) **(80e:70006)**

Asakura, Fumioki On the Green's function for $\Delta - \lambda^2$ with the boundary condition of the third kind in the exterior domain of a bounded obstacle. **(80c:35022)**

Bahvalov, N. S. The averaging of partial differential equations with rapidly oscillating coefficients. (Russian) **(80c:73027)**

Baili, Raffaele (*with* Pucci, Edvige) Exact solutions of the Strakhovitch type in magneto-fluid dynamics. (Italian. French summary) **(80i:76045)**

Blatinskiĭ, Ju. P. Uniqueness classes of the solutions of the Helmholtz equation. (Russian) **(80f:35034)**

Bollé, D. (*with* Osborn, T. A.) Time delay in N-body scattering. **(80g:81066)**

Borcea, Ciprian Sorin Quasilinear analytic partial differential equations in involution. (Romanian. French summary) **(80h:35003)**

Borovikov, V. A. (*with* Kinber, B. E.) ★Геометрическая теория дифракции. (Russian) [The geometric theory of diffraction] **(80c:78001)**

Brar, G. S. Similarity solutions by group transforms for unsteady hydromagnetic free convection flow. (French and Serbo-Croatian summaries) **(80a:76051)**

Chabrowski, Jan (*with* Johnson, Raymond) An axiomatic approach to the problem of representation of solutions of parabolic equations and systems. (Russian summary) **(80d:35084)**

Constanda, Christian Some comments on the integration of certain systems of partial differential equations in continuum mechanics. (French summary) **(80h:73018)**

Craik, A. D. D. (*with* Adam, J. A.) Evolution in space and time of resonant wave triads. I. The "pump-wave approximation". **(80b:81022a)**

Evolution in space and time of resonant wave triads. II. A class of exact solutions. **(80b:81022b)**

Dolph, Charles L. (*with* Scott, Richard A.) Recent developments in the use of complex singularities in electromagnetic theory and elastic wave propagation. **(80h:78001)**

Finley, J. D., III (*with* Plebański, Jerzy F.) The classification of all $\mathcal{H}$ spaces admitting a Killing vector. **(80g:83005)**

Fitzgibbon, W. E. Product integral representation of solutions to semilinear Volterra equations with delay. **(80g:45002)**

Gabov, S. A. (*with* Svešnikov, A. G.) Applications of angular potential. Solution of problems of the diffraction of tide waves. (Russian) **(80i:35063)**

Gervais, Jean-Loup *See* **de Vega, H. J.; et al., (80e:81037a)** *and* **de Vega, H. J.; et al., (80e:81037b)**

Greenspan, Martin Piston radiator: some extensions of the theory. **(80h:76032)**

Gustavsson, L. Håkan Initial value problem for boundary layer flows. **(80m:76057)**

Hawlitschek, Kurt Green-Funktionen für Wärmeleiter mit beweglichen Rändern. (English summary) **(80a:35057)**

Inomata, Akira *See* **Langguth, Wolfgang, (80b:81036)**

Israilov, M. Š. Exact solutions of problems of wave diffraction on two parallel half-planes. (Russian) **(80f:73034)**

Jaglom, A. M. *See* **Kader, B. A., (80a:76034)**

Johnson, Raymond *See* **Chabrowski, Jan, (80d:35084)**

Kader, B. A. (*with* Jaglom, A. M.) Similarity treatment of moving-equilibrium turbulent boundary layers in adverse pressure gradients. **(80a:76034)**

Kuliev, Ju. N. Quantum fluctuations of instantons in the nonlinear O(3) σ-model. **(80g:81079)**

Kay, Irvin W. *See* **Kline, Morris, (80c:78002)**

Kinber, B. E. *See* **Borovikov, V. A., (80c:78001)**

Kleinman, Ralph E. Low frequency electromagnetic scattering. **(80j:78005)**

Kline, Morris (*with* Kay, Irvin W.) ★Electromagnetic theory and geometrical optics. **(80c:78002)**

Kononenko, M. M. *See* **Andriankin, È. I., (80h:73011)**

Koiparënok, V. N. (*with* Šestopalov, V. P.) A rigorous solution of the problem of the perturbation of two circular cylinders with longitudinal slits. (Russian) **(80f:78004)**

Koval', F. F. *See* **Rvačov, V. L.; et al., (80a:65232)**

Kravčenko, V. P. *See* **Kuhta, K. Ja., (80f:73002)**

Kuhta, K. Ja. (*with* Kravčenko, V. P.) ★Нестационарные граничные задачи с непрерывно-дискретными параметрами. (Russian) [Nonstationary boundary value problems with continuous-discrete parameters] **(80f:73002)**

Lanckau, Eberhard Die Riemannfunktion selbstadjungierter Gleichungen. **(80k:35048)**

Langguth, Wolfgang (*with* Inomata, Akira) Remarks on the Hamiltonian path integral in polar coordinates. **(80b:81036)**

Man'ko, G. P. *See* **Rvačov, V. L.; et al., (80a:65232)**

Masalov, S. O. Certain infinite systems in wave diffraction theory. (Russian. English summary) **(80g:78011)**

Mignard, F. Multiple expansion of the tidal potential. **(80a:86003)**

Natroĭvili, D. G. A general representation of the solution of a system of equations of the moment theory of elasticity and its application to the solution of dynamical problems. (Russian. Georgian and English summaries) **(80e:73005)**

Ng, K. Y. K. A note on the upper and lower solutions of a mass transfer problem with chemical kinetics. **(80g:80010)**

Nikolić-Despotović, Danica The representation of one exponential function. **(80j:44013)**

Osborn, T. A. *See* **Bollé, D., (80g:81066)**

Panič, O. I. Potential representations of solutions of boundary value problems that reduce to associated pseudodifferential equations on the boundary of the domain. (Russian) **(80k:35023)**

Pao, Young-ping Nonlinear behavior of linearly unstable magnetohydrodynamic modes. **(80c:76060)**

Plebański, Jerzy F. *See* **Finley, J. D., III, (80g:83005)**

Pucci, Edvige *See* **Balli, Raffaele, (80i:76045)**

Rosinger, Elemer E. ★Distributions and nonlinear partial differential equations. **(80j:46067)**

Rvačov, V. L. (*with* Koval', F. F.; Man'ko, G. P.) New constructive means of the R-function method. (Russian. English summary) **(80a:65232)**

Sakita, B. *See* **de Vega, H. J.; et al., (80e:81037a)** *and* **de Vega, H. J.; et al., (80e:81037b)**

Sasai, Takao The Cauchy problem for Tricomi's equation and the relations between generating functions and entire functions. **(80h:35099)**

Scott, Richard A. *See* **Dolph, Charles L., (80h:78001)**

Segur, Harvey *See* **Ablowitz, Mark J., (80k:76013)**

Šestopalov, V. P. *See* **Koiparënok, V. N., (80f:78004)**

Sternin, B. Ju. Maslov's canonical operator method. (Russian) **(80k:58094)**

Sveĭnikov, A. G. *See* **Gabov, S. A., (80i:35063)**

Taha, M. O. Periodic solutions to classical field equations. **(80i:81038)**

Tao, L. N. On solidification problems including the density jump at the moving boundary. **(80h:80006)**

Tarasov, R. P. Errata: "Ray equations for arbitrarily curved cylinders with refractive index varying according to the cross section, and some cases of their integration" (Ž. Vyčisl. Mat. i Mat. Fiz. **16** (1976), no. 6, 1539–1550). (Russian) **(80e:78016)**

Tartar, L. Une nouvelle méthode de résolution d'équations aux dérivées partielles non linéaires. **(80b:35007)**

Titov, S. S. Convergence of the logarithmic series for an axially symmetric double wave in the neighborhood of a quiescent region. (Russian) **(80b:76029)**

de Vega, H. J. (*with* Gervais, Jean-Loup; Sakita, B.) Real-time approach to instanton phenomena. I. Multidimensional potentials with degenerate absolute minima. **(80e:81037a)**

(*with* Gervais, Jean-Loup; Sakita, B.) Real-time approach to instanton phenomena. II. Multidimensional potential with continuous symmetry. **(80e:81037b)**

Viktorov, I. A. Types of acoustic surface waves in solids (review). **(80j:73015)**

Wittig, F. E. Solutions of partial differential equations for mean molar functions. **(80c:80014)**

Wolfe, Peter Diffraction of a plane wave by a circular disk. **(80f:35039)**

35Dxx Generalized solutions

Secondary classifications:

Klimov, V. S. Smoothness of the solutions of one-dimensional variational problems. (Russian) **(80b:49002)**

35D05 Existence of generalized solutions

Demidenko, G. V. *See* **Uspenskiĭ, S. V., 80m:35015**

Kerner, R. Some properties of generalized solutions of quasilinear degenerate parabolic equations. (Russian) **80d:35032**

Uspenskiĭ, S. V. (*with* Demidenko, G. V.) Differential properties of the solutions of general boundary value problems for equations of Sobolev type. (Russian) **80m:35015**

Secondary classifications:

Castro, Alfonso A semilinear Dirichlet problem. **(80d:35062)**

Chrzęszczyk, Andrzej On existence and uniqueness problem of generalized solutions for nonlinear system of differential equations. (Russian summary) **(80j:35033)**

Jerome, Joseph W. The methods of lines and the nonlinear Klein-Gordon equation. **(80c:35068)**

Pathak, Ram Shankar On the existence of fundamental solutions of certain boundary value problems. **(80d:35006)**

35D10 Regularity of generalized solutions

Biancardi, Mirella (*with* Toscano, Raffaele) The regularity of the solution to a variational inequality. (Italian. English summary) **80m:35016**

Burch, Charles C. The Dini condition and regularity of weak solutions of elliptic equations. **80f:35027**

Giusti, Enrico (*with* Modica, Giuseppe) A note on regular points for solutions of elliptic systems. **80m:35017**

Modica, Giuseppe *See* **Giusti, Enrico, 80m:35017**

Schulze, B.-W. On the mean value distributions associated with higher order elliptic equations. **80m:35018**

Simon, Jacques Régularité de la solution d'une équation non linéaire dans $\mathbb{R}^N$. **80b:35035**

Tanabe, Hiroki On some unilateral problem of elliptic and parabolic type. **80d:35033**

Toscano, Raffaele *See* **Biancardi, Mirella, 80m:35016**

Secondary classifications:

Caffarelli, Luis A. (*with* Friedman, Avner) Regularity of the solution of the quasivariational inequality for the impulse control problem. **(80a:49006)**

Friedman, Avner *See* **Caffarelli, Luis A., (80a:49006)**

35D99 None of the above, but in this section

Tartar, L. Quelques remarques sur les systèmes semi-linéaires. **80b:35036**

Secondary classifications:

Bertiger, William Maximum principles, gradient estimates, and weak solutions for second-order partial differential equations. **(80g:35018)**

Dezin, A. A. Second-order operator equations. (Russian) **(80d:47018)**

Roitberg, Ja. A. The existence of limit values of generalized solutions of elliptic equations on the boundary of the domain. (Russian) **(80k:35062)**

35Exx Equations and systems with constant coefficients [See also 35N05.]

35E05 Fundamental solutions

Cattabriga, Lamberto Fundamental solutions with singular support contained in a cone or in a half-space. Applications. **80g:35026**

Ortner, Norbert Fundamentallösungen und Existenz von schwachen Lösungen linearer partieller Differentialgleichungen mit konstanten Koeffizienten. **80g:35027**

Sekerž-Zen'kovič, S. Ja. Fundamental solution of the interior wave operator. (Russian) **80h:35029**

Secondary classifications:

Djusembaev, B. B. *See* **Sultangazin, U. M., (80f:35040)**

Sultangazin, U. M. (*with* Djusembaev, B. B.) Theorem on the existence and uniqueness of a solution in model kinetic equations. (Russian. Kazakh summary) **(80f:35040)**

35E10 Convexity properties

35E15 Initial value problems

Furuya, Hitoshi (*with* Nagumo, Mitio) On Cauchy problem for linear partial differential equations with constant coefficients. **80m:35019**

Hasegawa, Yukiko On the C^∞-problem for equations with constant coefficients. **80d:35034**

Nagumo, Mitio *See* **Furuya, Hitoshi, 80m:35019**

Zanghirati, Luisa On a reduced Cauchy problem in a half-space for linear differential operators with constant coefficients. (Italian. English summary) **80i:35037**

Secondary classifications:

Berechet, Oprea Le problème de Cauchy pour opérateurs partiellement semi-elliptiques. **(80g:35037)**

35E20 General theory

Littman, Walter Boundary control theory for hyperbolic and parabolic partial differential equations with constant coefficients. **80a:35023**

Louhivaara, Ilppo Simo (*with* Simader, Christian G.) Fredholmsche verallgemeinerte Dirichletprobleme für koerzitive lineare partielle Differentialoperatoren. **80i:35038**

Murata, Minoru (*with* Shibata, Yoshihiro) Lower bounds at infinity of solutions of partial differential equations in the exterior of a proper cone. **80b:35037**

Nishiwada, Kimimasa On weak evolution operators with constant coefficients and spreading of wave packets. **80e:35012**

Shibata, Yoshihiro *See* **Murata, Minoru, 80b:35037**

Simader, Christian G. *See* **Louhivaara, Ilppo Simo, 80i:35038**

Strömberg, Jan-Olov A weighted L^2-norm inequality for partial differential operators with constant coefficients. **80b:35038**

Zeilberger, Doron Solutions of exponential growth to systems of partial differential equations. **80h:35030**

35E99 None of the above, but in this section

Gordin, V. A. A mixed boundary value problem imitating the Cauchy problem. (Russian) **80j:35016**

Secondary classifications:

Ehrenpreis, Leon Edge of the wedge theorem for partial differential equations. **(80f:32040)**
Hirschowitz, André (*with* Piriou, A.) Propriétés de transmission pour les distributions intégrales de Fourier. **(80e:58041a)**
Piriou, A. Propagation et réflexion de la propriété de transmission des distributions de Fourier. **(80e:58041b)**
See also **Hirschowitz, André, (80e:58041a)**
Savčenko, G. B. The correctness of a boundary value problem for a system of linear differential equations. (Russian) **(80f:35121)**

35Fxx General first-order equations and systems

35F05 Linear equations and systems, general

Bil'man, B. M. *See* **Mihaĭlov, L. G., 80m:35020**
Mihaĭlov, L. G. (*with* Bil'man, B. M.) Some systems of first-order partial differential equations. (Russian) **80m:35020**
Nikolaenko, M. A. Characteristic lines of a first order quasilinear partial differential equation and the Pfaffian manifold. (Russian) **80a:35024**

Secondary classifications:

Goldschmidt, Bernd Funktionentheoretische Eigenschaften der Lösungen der Vekuaschen Differentialgleichung mit Koeffizienten in $L_{p,\lambda,\infty}(G)$. **(80g:30030)**

35F10 Initial value problems for linear equations and systems

Cardoso, Fernando (*with* Hounie, Jorge G.) First-order linear PDEs and uniqueness in the Cauchy problem. **80h:35031**
Hounie, Jorge G. *See* **Cardoso, Fernando, 80h:35031**

Secondary classifications:

Cardoso, Fernando (*with* Hounie, Jorge G.) Uniqueness in the Cauchy problem for first-order linear PDEs. **(80g:35004)**
Hounie, Jorge G. *See* **Cardoso, Fernando, (80g:35004)**

35F15 Boundary value problems for linear equations and systems

Agemi, Rentaro Characteristic mixed problems for Hermitian systems in three unknowns. **80g:35028**
Garnir-Monjoie, F. S. Spectral resolution of boundary value problems in a half-space for partial differential matrix operators of the first order. **80i:35039**

Secondary classifications:

Diuraev, A. D. Some space systems of first-order equations of composite type. (Russian) **(80g:35082)**

35F20 Nonlinear equations and systems, general

Djusembaev, B. B. *See* **Sultangazin, U. M., 80i:35040**
Perko, Richard Über partielle Differentialgleichungen von Briot-Bouquetschem Typ bei p-adisch bewertetem Grundkörper. **80c:35021**
Sultangazin, U. M. (*with* Djusembaev, B. B.) Theorem on the existence and uniqueness of a solution in model kinetic equations. (Russian. Kazakh summary) **80i:35040**
Tsuji, Mikio Solution globale et propagation des singularités pour l'équation de Hamilton-Jacobi. (English summary) **80i:35041**

Secondary classifications:

Kilp, H. The geometry of systems of first-order quasilinear partial differential equations with two independent variables and with different characteristics. (Russian. Estonian and English summaries) **(80c:53010)**

35F25 Initial value problems for nonlinear equations and systems

Secondary classifications:

Kurnecov, N. N. Weak solutions of first-order quasilinear equations and numerical methods for their computation. (Russian) **(80b:65123)**

35F30 Boundary value problems for nonlinear equations and systems

35F99 None of the above, but in this section

Secondary classifications:

Case, K. M. Integration of linearized evolution equations. **(80g:58026)**
Egorov, Ju. V. An inequality for first-order differential operators. (Russian) **(80d:35020)**
Elschner, Johannes Einige Bemerkungen zu einer Arbeit von Baouendi und Goulaouic. **(80c:35005)**
Gérard, Raymond Solutions formelles et convergentes de certains systèmes de Pfaff analytiques avec singularités. **(80h:58005)**
Pelczar, Andrzej A local version of the generalized retract theorem of Ważewski with applications in the theory of partial differential equations of first order. **(80i:54050)**

35Gxx General higher-order equations and systems

35G05 Linear equations and systems, general

Baillet-Intissar, Joëlle Problèmes aux limites non linéaires avec conditions mêlées. (English summary) **80b:35039**
Bronštein, M. D. (*with* Fridlender, V. R.) A characteristic Cauchy problem. (Russian) **80g:35029**
Dezin, A. A. Weak and strong extensions of differential operations. (Russian) **80b:3500**
Fridlender, V. R. *See* **Bronštein, M. D., 80g:35029**
Goldschmidt, Bernd Cousinsche Glättungsprobleme für lineare partielle Differentialgleichungen. **80j:35017**
Ishimura, Ryuichi On the existence of holomorphic solutions of singular partial differential equations. **80g:35030**
Kozlova, O. N. The summability of positive solutions of systems of arbitrary order partial differential equations in the neighborhood of a characteristic point. (Russian) **80g:35031**
Muhlisov, F. G. The existence and uniqueness of the solution of certain partial differential equations with the Bessel differential operator. I. (Russian) **80i:35042a**
The existence and uniqueness of the solution of certain partial differential equations with the Bessel differential operator. II. (Russian) **80i:35042b**
Ral'čenko, V. F. Qualitative properties of solutions of a mixed problem. (Russian) **80k:35017**
Suveika, I. V. The structure of the solutions of a mixed problem and the Cauchy problem for a nonstationary equation. (Russian) **80d:35035**

Secondary classifications:

Čerujavskiĭ, A. G. Criteria of quasianalyticity for partial differential operators with variable coefficients. (Russian) **(80m:26015)**

35G10 Initial value problems for linear equations and systems

Bubnov, B. A. The Darboux problem for a class of second-order equations. (Russian) **80f:35028**
Fajazov, K. S. The construction of the Carleman function in the nonhyperbolic Cauchy problem for the wave equation. (Russian) **80g:35032**
Zaicev, V. A. The Huygens principle for certain equations with singularities. (Russian) **80j:35018**

35G15 Boundary value problems for linear equations and systems

Boliey, P. (*with* Camus, J.) Powers and Gevrey's regularity for a system of differential operators. **80i:35043**
Camus, J. *See* **Boliey, P., 80i:35043**
Čečeva, N. A. A boundary value problem for an equation of order $2m+1$. (Russian) **80h:35032**
Džalilov, K. A. A boundary value problem in a half-space. (Russian) **80e:35013**
Grădinaru, N. The solution of a homogeneous evolution two-parameter system. (Romanian summary) **80m:35021**
Janušauskas, Algimantas Some systems of second-order partial differential equations. (Russian) **80f:35029**
Kančukoev, V. Z. (*with* Šhanukov, M. H.) Boundary value problems for a modified equation of moisture transfer and discrete methods for their solution. (Russian) **80i:35044**
Ponomarenko, V. G. (*with* Timan, M. F.) Behavior near the boundary of the solutions of a boundary value problem and of their derivatives. (Russian) **80i:35045**
Šhanukov, M. H. *See* **Kančukoev, V. Z., 80i:35044**
Timan, M. F. *See* **Ponomarenko, V. G., 80i:35045**

Secondary classifications:

Balint-Kurti, G. G. *See* **Shapiro, M., (80e:81104)**
Mamedov, K. Š. The completeness of root vector functions of a general boundary value problem for an operator-differential equation, and the application to irregular boundary value problems for partial differential equations. (Russian. Azerbaijani and English summaries) **(80e:34042)**
Shapiro, M. (*with* Balint-Kurti, G. G.) A new method for the exact calculation of vibrational-rotational energy levels of triatomic molecules. **(80e:81104)**

35G20 Nonlinear equations and systems, general

Bicadze, A. V. A class of quasilinear partial differential equations. (Russian) **80b:35041**
Bidaut-Véron, Marie-Françoise Propriété de support compact de la solution d'une équation aux dérivées partielles non linéaire d'ordre 4. (English summary) **80a:35025**
Bony, Jean-Michel Calcul symbolique et singularités des solutions des équations aux dérivées partielles non linéaires. **80i:35046**
Osipov, F. L. Nonlinear differential operators that are representable in divergence form. (Russian) **80g:35033**
Tartar, L. Some remarks on semilinear systems. (Russian) **80i:35047**
Tvorogov, V. B. A sharp front and singularities of the solutions of a class of nonhyperbolic equations. (Russian) **80g:35034**

Secondary classifications:

Čan Dyk Van Nontriviality of infinite order Sobolev spaces with a weight on the whole Euclidean space, and solvability of some degenerate nonlinear equations. (Russian) **(80k:46034)**

Pokoloev, S. I. An approach to nonlinear equations. (Russian) **(80j:47084)**
Titov, S. S. Expansion of the solutions of nonlinear equations into double series. (Russian) **(80d:35023)**
Webb, G. F. Abstract Volterra integro-differential equations and a class of reaction-diffusion equations. **(80j:45018)**

35G25 Initial value problems for nonlinear equations and systems

Bronštein, M. D. The Goursat problem over Gevrey spaces. (Russian) **80j:35019**
Wagschal, Claude Le problème de Goursat non linéaire dans les espaces de Gevrey. (English summary) **80f:35030**

Secondary classifications:

Calogero, F. Spectral transform and nonlinear evolution equations. **(80g:35107)**

35G30 Boundary value problems for nonlinear equations and systems

Dincă, George (*with* Rosca, Ioan) Une méthode variationnelle pour l'étude des opérateurs non linéaires à différentielle K-positivement définie. (English summary) **80a:35026**
Kožanov, A. I. A mixed problem for a class of equations of nonclassical type. (Russian) **80g:35035**
Rosca, Ioan *See* **Dincă, George, 80a:35026**
Showalter, R. E. Degenerate parabolic initial-boundary value problems. **80h:35033**
Soltanov, K. N. The solvability of certain nonlinear problems in nonreflexive Banach spaces. (Russian. Azerbaijani and English summaries) **80b:35042**

Secondary classifications:

Borodin, A. V. An estimate for second-order partial differential equations and its application. (Russian) **(80d:35012)**
Conjura, E. (*with* Petryshyn, Walter V.) Extension of nonlinear densely defined operators, rates of convergence for the error and the residual, and application to differential equations. **(80c:47056)**
Fitzpatrick, P. M. Existence results for equations involving noncompact perturbations of Fredholm mappings with applications to differential equations. **(80b:47084)**
Petryshyn, Walter V. *See* **Conjura, E., (80c:47056)**

35G99 None of the above, but in this section

Kazarjan, G. G. Inequalities for differential polynomials with variable coefficients. (Russian) **80j:35020**
Roşculeţ, Marcel N. Sur les équations aux dérivées partielles qui expriment les conditions de monogénéité, itérées. **80d:35036**
Żadan, M. I. Remark on the number of connectivity components of certain sets of systems that are elliptic in the sense of Douglis and Nirenberg. (Russian) **80g:35036**

Secondary classifications:

Kaljakin, L. A. Variational inequalities with a small parameter. (Russian) **(80g:47012)**
Kufner, Alois Function spaces. **(80g:46030)**
Mukherjee, Deepankar Some uniqueness theorems in the theory of elasticity. **(80c:73013)**

35H05 Hypoelliptic equations and systems [See also 58Gxx.]

Baouendi, M. S. (*with* Treves, F.; Zachmanoglou, E. C.) Flat solutions and singular solutions of homogeneous linear partial differential equations with analytic coefficients. **80h:35034**
Berechet, Oprea Le problème de Cauchy pour opérateurs partiellement semi-elliptiques. **80g:35037**
Bolley, P. (*with* Camus, J.; Helffer, Bernard) Hypoellipticité pour une équation d'évolution abstraite du second ordre. **80f:35031**
Camus, J. *See* **Bolley, P.; et al., 80f:35031**
Croc, Elisabeth (*with* Dermenjian, Yves; Iftimie, Viorel) Une classe d'opérateurs pseudo-différentiels partiellement hypoelliptique-analytiques. **80d:35037**
(*with* Dermenjian, Yves; Iftimie, Viorel) Une classe d'opérateurs pseudo-différentiels partiellement hypoelliptique-analytiques. **80e:35014**
Dermenjian, Yves *See* **Croc, Elisabeth; et al., 80d:35037** *and* **Croc, Elisabeth; et al., 80e:35014**
Durand, M. Régularité Gevrey d'une classe d'opérateurs hypo-elliptiques. **80f:35032**
Helffer, Bernard (*with* Nourrigat, Jean François) Hypoellipticité maximale pour des opérateurs polynômes de champs de vecteurs. (English summary) **80k:35018**
(*with* Nourrigat, Jean François) Construction de paramétrixes pour une nouvelle classe d'opérateurs pseudodifférentiels. **80e:35015**
See also **Bolley, P.; et al., 80f:35031**
Hirvonen, Kullervo Bemerkungen über den Hypoelliptizitätsindex hypoelliptischer Polynome. **80i:35048**
Hounie, Jorge G. Global hypoellipticity of periodic first-order evolution operators. **80f:35033**
A note on global hypoellipticity. **80i:35049**
Globally hypoelliptic and globally solvable first-order evolution equations. **80h:35035**
Iftimie, Viorel *See* **Croc, Elisabeth; et al., 80d:35037** *and* **Croc, Elisabeth; et al., 80e:35014**
Kazarjan, G. G. (*with* Markarjan, V. N.) Hypoellipticity criteria in terms of power and strength of operators. (Russian) **80k:35019**
Comparison of the power of polynomials and their hypoellipticity. (Russian) **80k:35020**
Kim, Jongsik Hypoellipticity in the complexes of pseudodifferential operators. **80a:35027**
Kučment, P. A. Floquet representation of the solutions of linear hypo-elliptic systems of partial differential equations. (Russian) **80g:35038**
Langenbruch, Michael P-Funktionale und Randwerte zu hypoelliptischen Differentialoperatoren. **80h:35036**
Markarjan, V. N. *See* **Kazarjan, G. G., 80k:35019**
Matsuzawa, T. Construction of fundamental solutions of hypoelliptic equations by the use of a probabilistic method. **80d:35038**
Nomas, Jean-Clarence Paramétrix du problème de Cauchy pour une classe de systèmes hyperboliques symétrisables à caractéristiques involutives de multiplicité variable. (English summary) **80b:35043**
Nourrigat, Jean François *See* **Helffer, Bernard, 80e:35015** *and* **Helffer, Bernard, 80k:35018**
Parenti, Cesare The hypoellipticity problem. (Italian. English summary) **80i:35050**
Pehkonen, Erkki Ein hypoelliptisches Dirichletproblem. (English summary) **80j:35021**
Popivanov, P. R. The hypoellipticity of a certain class of pseudodifferential systems. (Russian) **80k:35021**
Rangelov, C. V. An a priori estimate and hypoellipticity of a certain class of pseudodifferential operators with multiple characteristics. (Russian. English summary) **80d:35039**
Rothschild, Linda Preiss (*with* Tartakoff, David S.) Parametrices with C^∞ error for $\Box_b$ and operators of Hörmander type. **80g:35039**
Šimarev, I. A. The Cauchy problem for hypoelliptic systems and representation of the interaction. (Russian) **80i:35051**
Tartakoff, David S. Remarks on isolated degeneracies of the Levi form and the analytic hypoellipticity of $\Box_b$ and related partial differential operators. **80g:35040**
See also **Rothschild, Linda Preiss, 80g:35039**
Treves, F. *See* **Baouendi, M. S.; et al., 80h:35034**
Wakita, Masu A remark on the functional dimension of the space of solutions of semi-elliptic equations. **80h:35037**
Zachmanoglou, E. C. *See* **Baouendi, M. S.; et al., 80h:35034**

Secondary classifications:

Cardoso, Fernando (*with* Hounie, Jorge G.) Global solvability and hypoellipticity of abstract complexes and equations. **(80d:58062)**
Derridj, Maklouf On some estimates for the $\bar\partial$ Neumann problem in nonpseudoconvex domains. **(80k:32023)**
Gaveau, Bernard Systèmes dynamiques associés à certains opérateurs hypoelliptiques. (English summary) **(80b:58053)**
Geller, Daryl Fourier analysis on the Heisenberg group. **(80g:22011)**
Helffer, Bernard (*with* Nourrigat, Jean François) Opérateurs hypoelliptiques sur des groupes nilpotents. **(80m:58037)**
Hörmander, Lars Spectral analysis of singularities. **(80m:35058)**
Hounie, Jorge G. *See* **Cardoso, Fernando, (80d:58062)**
Kohn, J. J. Subelliptic estimates. **(80i:35134)**
Subellipticity of the $\bar\partial$-Neumann problem on pseudo-convex domains: sufficient conditions. **(80d:32020)**
Langenbruch, Michael Randverteilungen von Nullösungen hypoelliptischer Differentialgleichungen. (English summary) **(80d:46075)**
Louhivaara, Ilppo Simo (*with* Simader, Christian G.) Über periodische Lösungen koerzitiver linearer partieller Differentialgleichungen. **(80h:35006)**
Malliavin, Paul Un principe de transfert et son application au calcul des variations. (English summary) **(80a:58036a)**
Hypoellipticité avec dégénérescence et analyse stochastique en dimension infinie. (English summary) **(80a:58036b)**
C^k-hypoellipticity with degeneracy. **(80i:58045a)**
C^k-hypoellipticity with degeneracy. II. **(80i:58045b)**
Manankiandrianana, Donasoa Comportement du noyau de la chaleur d'un opérateur hypoelliptique dégénéré pour des temps petits. (English summary) **(80k:32024)**
Mella, A. Free systems of vector fields. **(80d:58064)**
Métivier, Guy Propriété des itérés et ellipticité. **(80f:35047)**
Nourrigat, Jean François *See* **Helffer, Bernard, (80m:58037)**
Noutchegueme, Norbert Application de la théorie de Leray au problème de Cauchy sur deux hypersurfaces caractéristiques sécantes. (English summary) **(80k:35068)**
Rothschild, Linda Preiss Smoothness of solutions of certain partial differential equations constructed from vector fields. **(80m:58038)**
A criterion for hypoellipticity of operators constructed from vector fields. **(80e:58040)**
Simader, Christian G. *See* **Louhivaara, Ilppo Simo, (80h:35006)**
Tartakoff, David S. Local analytic hypoellipticity for $\Box_b$ on nondegenerate Cauchy-Riemann manifolds. **(80g:58045)**
Winzell, Bengt Sub-elliptic estimates for the oblique derivative problem. **(80f:35046)**

35Jxx Elliptic equations and systems [See also 58G05, 58G10.]

Šimarev, I. A. ★Введение в теорию эллиптических уравнений. (Russian) [Introduction to the theory of elliptic equations] **80g:35041**

Secondary classifications:

Puel, J.-P. A free boundary, nonlinear eigenvalue problem. **(80b:49036)**
Triebel, Hans ★Interpolation theory, function spaces, differential operators. **(80i:46032a)**
★Interpolation theory, function spaces, differential operators. **(80i:46032b)**

35J05 Laplace equation, reduced wave equation (Helmholtz), Poisson equation

Asakura, Fumioki On the Green's function for $\Delta - \lambda^2$ with the boundary condition of the

third kind in the exterior domain of a bounded obstacle. **80c:35022**

Atabodžaev, M. A. (*with* Kobilov, U. È.) The Cauchy problem for the Laplace equation in an infinite three-dimensional layer. (Russian) **80e:35016**

Blatinskiĭ, Ju. P. Uniqueness classes of the solutions of the Helmholtz equation. (Russian) **80f:35034**

Chakrabarti, Aloknath A direct approach to the problem of diffraction by a half-plane under mixed boundary conditions. (German and Russian summaries) **80k:35022**

Elkin, N. N. The existence and uniqueness of the solution of boundary value problems in the theory of long waves on surfaces of a rotating fluid. (Russian) **80j:35022**

Erofeenko, V. T. Solution of a boundary value problem for the Helmholtz equation in a layered space with a spherical inclusion. (Russian) **80a:35028**

Favorin, V. M. Behavior of the Green function of the third exterior boundary value problem for the two-dimensional Helmholtz equation $\Delta u + k^2 u = f$, as $k \to 0$. (Russian) **80g:35042**

Gabov, S. A. *See* **Vabiščevič, P. N.; et al., 80k:35024**

Guillot, Jean-Claude (*with* Wilcox, Calvin H.) Steady-state wave propagation in simple and compound acoustic waveguides. **80c:35023**

Hilčrbekov, T. È. A mixed boundary value problem for an elliptic equation in three-dimensional space. (Russian) **80f:35035**

Solution of the T_3^+ problem for an elliptic equation in three-dimensional space. (Russian) **80f:35036**

Ivanov, E. A. Solution of a mixed boundary value problem of the mathematical theory of diffraction by the method of paired integral equations. (Russian) **80l:35052**

Kobilov, U. È. *See* **Atabodžaev, M. A., 80e:35016**

Lal, Bansi An electrostatic problem of a semicircular strip. **80j:35023**

Mattioli, Franco Some integral formulations of the scalar Helmholtz equation. **80c:35017**

Narkun, Z. M. Green functions of the Dirichlet problem for the Laplace equation in a strip and a rectangle with N circular slits. (Russian) **80c:35024**

Panič, O. I. Potential representations of solutions of boundary value problems that reduce to associated pseudodifferential equations on the boundary of the domain. (Russian) **80k:35023**

Raitums, U. Some properties of the gradient of the solution of the Poisson equation in a convex domain. (Russian) **80f:35037**

Rasun, A. G. A uniqueness theorem for the solution of the Dirichlet problem. (Russian) **80f:35038**

Ševcov, P. V. *See* **Vabiščevič, P. N.; et al., 80k:35024**

Vabiščevič, I. I. On the solutions of the Cauchy problem for the Laplace equation in a doubly connected domain. (Russian) **80e:35018**

Vabiščevič, P. N. (*with* Gabov, S. A.; Ševcov, P. V.) Angular potential for the operator $\Delta + c(x)$. (Russian) **80k:35024**

Verheggen, Th. M. M. Note on the convergence of the Bremmer series. **80b:35044**

Véron, Laurent Solutions singulières d'équations elliptiques semilinéaires. (English summary) **80h:35038**

Wilcox, Calvin H. *See* **Guillot, Jean-Claude, 80c:35023**

Wolfe, Peter Diffraction of a plane wave by a circular disk. **80f:35039**

Secondary classifications:

Acker, Andrew Isoperimetric inequalities involving heat flow—the case of a one-sided linear radiation condition. (German summary) **80b:35024**

Alber, Hans-Dieter A quasi-periodic boundary value problem for the Laplacian and the continuation of its resolvent. **80e:35050**

Borodin, M. A. (*with* Fel'genhauër, U.) An axially symmetric single-phase Stefan problem. (Russian) **80b:35069**

Čumačenko, V. P. Application of the method of integral equations for the solution of a class of problems of electrodynamics. (Russian. English summary) **80c:78021**

Fel'genhauër, U. *See* **Borodin, M. A., 80b:35069**

Górowski, Jan On the Dirichlet problem for interior and for exterior of an elliptic domain. **80k:35012**

Jones, D. S. Electromagnetic tunnelling. **80e:78002**

Kleinman, Ralph E. On the solution of the Helmholtz equation in the neighborhood of a corner. **80a:78007**

Král, Josef Boundary behavior of potentials. **80m:31002**

Lyford, William C. Spectral analysis of the Laplacian in distorted periodic waveguides. **80f:35091**

Moĭinskiĭ, A. V. Construction of the Green function of the Helmholtz equation for a semi-infinite rectangular domain with the aid of Bessel functions. (Russian) **80b:35034**

Murphy, Joseph E. Spectral domain formulation for acoustic scattering. **80h:76041**

Narkun, Z. M. Solution of the Dirichlet problem for the Laplace equation, and structure of its Green function in the case of a plane with N elliptic cuts. (Russian) **80e:35020**

Nikolaev, B. G. An approach to the solution of problems in the case of asymmetric ring domains. (Russian. English summary) **80g:35021**

Poljanskiĭ, È. A. On estimates of the solution of the Helmholtz equation in a plane waveguide. (Russian) **80b:76035**

Popivanov, P. R. The hypoellipticity of a certain class of pseudodifferential systems. (Russian) **80k:35021**

Roach, G. F. On the commutative properties of boundary integral operators. **80e:35010**

Rühs, Fritz Über die Lösung der Potentialgleichung im Halbstreifen durch Integraltransformation. **80h:35025**

Weston, Vaughan H. Nonlinear approach to inverse scattering. **80b:78010**

35J10 Schrödinger operator [See also 47A40.]

Cazenave, Thierry (*with* Haraux, Alain) Équation de Schrödinger avec non-linéarité logarithmique. (English summary) **80b:35045**

Fujiwara, Daisuke A construction of the fundamental solution for the Schrödinger equations. **80h:35039**

Gajewski, Herbert On an initial-boundary value problem for the nonlinear Schrödinger equation. **80g:35043**

Ginibre, Jean (*with* Velo, Giorgio) Équation de Schrödinger non linéaire avec interaction non locale. (English summary) **80c:35025**

Haraux, Alain *See* **Cazenave, Thierry, 80b:35045**

Inoue, Hiroshi *See* **Kawata, Tutomu, 80a:35030**

Jensen, Robert Uniqueness of solutions to $-\Delta u - qu = 0$. **80c:35026**

Kalf, H. Non-existence of eigenvalues of Schrödinger operators. **80a:35029**

Kawata, Tutomu (*with* Inoue, Hiroshi) Exact solutions of the derivative nonlinear Schrödinger equation under the nonvanishing conditions. **80a:35030**

Khosrovshahi, G. B. (*with* Levine, H. A.; Payne, L. E.) On the positive spectrum of Schrödinger operators with long range potentials. **80l:35053**

Levine, H. A. *See* **Khosrovshahi, G. B.; et al., 80l:35053**

Payne, L. E. *See* **Khosrovshahi, G. B.; et al., 80l:35053**

Piraux, Rémi L'opérateur de Schrödinger sur **R** avec un potentiel mesurable positif. (English summary) **80m:35022**

Popov, M. M. Correctness of the problem of whispering gallery waves in the vicinity of points where the boundary becomes straight. (Russian. English summary) **80k:35025**

Sohr, Hermann Über die Selbstadjungiertheit von Schrödinger-Operatoren. **80d:35040**

Velo, Giorgio *See* **Ginibre, Jean, 80c:35025**

Secondary classifications:

Blaquière, Augustin Extension d'une théorie de Feynman. (English summary) **(80b:81019)**

Bose, S. K. *See* **Müller-Kirsten, H. J. W.; et al., (80m:81018)** *and* **Müller-Kirsten, H. J. W., (80m:81019)**

Brézis, Haïm (*with* Kato, Tosio) Remarks on the Schrödinger operator with singular complex potentials. **(80l:35135)**

Choodnovsky, Gregory V. *See* **Chudnovsky, David V., (80b:35132)**

Chudnovsky, David V. (*with* Choodnovsky, Gregory V.) Problèmes des valeurs propres méromorphes, interprétation des pôles et problème avec nombreuses particules pour équations non linéaires. (English summary) **(80b:35132)**

Delos, John B. *See* **Swimm, Randall T., (80m:81039)**

Dumont-Lepage, M.-Cl. (*with* Ronveaux, André) États liés de potentiels bisphériques et toroïdaux. (English summary) **(80m:81016)**

Gestrin, G. N. A uniqueness theorem in a multidimensional inverse problem for the operator $-\Delta + v(r)$. (Russian. English summary) **(80b:35141)**

Ginibre, Jean (*with* Velo, Giorgio) Existence of solutions and scattering theory for the nonlinear Schrödinger equation. **(80k:35055)**

Hite, G. E. *See* **Müller-Kirsten, H. J. W.; et al., (80m:81018)**

Hristov, E. H. Expansions in squares of the solutions of the radial Schrödinger equation. (Russian. English summary) **(80c:81017)**

Kato, Tosio *See* **Brézis, Haïm, (80l:35135)**

Knowles, Ian On the existence of minimal operators for Schrödinger-type differential expressions. **(80d:35115)**

Kovalenko, V. F. (*with* Semenov, Ju. A.) Some questions on expansions in generalized eigenfunctions of a Schrödinger operator with strongly singular potentials. (Russian) **(80f:35092)**

Mochizuki, Kiyoshi (*with* Uchiyama, Jun) Radiation conditions and spectral theory for 2-body Schrödinger operators with "oscillating" long-range potentials. II. **(80g:35100)**

Müller-Kirsten, H. J. W. (*with* Hite, G. E.; Bose, S. K.) Explicit solution of the wave equation for arbitrary power potentials with application to charmonium spectroscopy. **(80m:81018)**

(*with* Bose, S. K.) Solution of the wave equation for the logarithmic potential with application to particle spectroscopy. **(80m:81019)**

Murata, Minoru Scattering solutions decay at least logarithmically. **(80l:35144)**

Prudkovskiĭ, A. G. The WKB method for a system of Schrödinger equations and the order of its accuracy in the case of characteristics of variable multiplicity. (Russian) **(80l:35034)**

Ronveaux, André *See* **Dumont-Lepage, M.-Cl., (80m:81016)**

Schonbek, Tomas Decay of solutions of Schroedinger equations. **(80j:35079)**

Semenov, Ju. A. On the problem of convergence of a bounded-below sequence of symmetric forms for the Schrödinger operator. **(80j:35080)**

See also **Kovalenko, V. F., (80f:35092)**

Sohr, Hermann Über die Existenz von Wellenoperatoren für zeitabhängige Störungen. (English summary) **(80d:47012)**

Stillinger, Frank H. Solution of a quantum mechanical eigenvalue problem with long range potentials. **(80m:81022)**

Swimm, Randall T. (*with* Delos, John B.) Semiclassical calculations of vibrational energy levels for nonseparable systems using the Birkhoff-Gustavson normal form. **(80m:81039)**

Uchiyama, Jun *See* **Mochizuki, Kiyoshi, (80g:35100)**

Velo, Giorgio *See* **Ginibre, Jean, (80k:35055)**

35J15 Second-order equations, general

Alber, Hans-Dieter Estimates for the asymptotic behavior of solutions of the Helmholtz equation, with an application to second-order elliptic differential operators with variable coefficients. **80f:35040**

Benci, Vieri (*with* Fortunato, Donato) Second-order elliptic operators on unbounded domains. (Italian summary) **80f:35041a**

(*with* Fortunato, Donato) Errata corrige: "Second-order elliptic operators on unbounded domains" [Boll. Un. Mat. Ital. B (5) **15** (1978), no. 1, 193–209; MR 80f:35041a]. **80f:35041b**

Bojarski, B. (*with* Iwaniec, Tadeusz) Topics in quasiconformal theory in several variables. **80l:35054**

Clément, Philippe (*with* Peletier, Lambertus Adrianus) Un principe du maximum pour des opérateurs elliptiques non coercifs. (English summary) **80b:35046**

Dubois, Roger-Marie *See* **Nghiêm Dăng Ngọc, 80d:35041**

Fortunato, Donato *See* **Benci, Vieri, 80f:35041a** *and* **Benci, Vieri, 80f:35041b**

Grigor'jan, A. A. On the connection of orders with which the solutions of second-order homogeneous elliptic equations in unbounded domains tend to $+\infty$ and $-\infty$. (Russian. English summary) **80k:35026**

Gu, Yong Geng *See* **Zhang, Wei Tao; et al., 80j:35024**

Iwaniec, Tadeusz *See* **Bojarski, B., 80i:35054**

Ji, Xin Hua *See* **Zhang, Wei Tao; et al., 80j:35024**

Kametaka, I. (*with* Oleĭnik, O. A.) Asymptotic properties and necessary conditions for the existence of solutions of second-order nonlinear elliptic equations. (Russian) **80g:35044**

König, Manfred Eine kritische Bemerkung zu Darstellungen der Schauderschen Beweistechnik für elliptische lineare Differentialgleichungen. (English summary) **80g:35045**

Landis, E. M. (*with* Panasenko, G. P.) A variant of a theorem of Phragmén-Lindelöf type for elliptic equations with coefficients that are periodic in all variables but one. (Russian) **80k:35027**

Lions, Pierre-Louis Problèmes elliptiques du 2ème ordre non sous forme divergence. (English summary) **80m:35023**

Marcellini, Paolo (*with* Sbordone, Carlo) Homogenization of nonuniformly elliptic operators. **80f:35042**

Convergence of second order linear elliptic operators. (Italian summary) **80i:35055**

Martinenko, Marija D. *See* **Martynenko, Mih. D., 80i:35056**

Martynenko, Mih. D. (*with* Martinenko, Marija D.) Fundamental matrices of some second-order elliptic systems with a parameter in a Riemmanian space. (Russian. English summary) **80i:35056**

Meier, Michael Liouville theorems for nonlinear elliptic equations and systems. **80m:35024**

Nghiêm Dáng Ngọc (*with* Dubois, Roger-Marie) Une remarque sur un principe du maximum pour des équations semi-elliptiques quasi-linéaires. (English summary) **80d:35041**

Oleĭnik, O. A. *See* **Kametaka, I., 80g:35044**

Panasenko, G. P. *See* **Landis, E. M., 80k:35027**

Peletier, Lambertus Adrianus *See* **Clément, Philippe, 80b:35046**

Sbordone, Carlo *See* **Marcellini, Paolo, 80f:35042**

Swanson, C. A. Semilinear second-order elliptic oscillation. **80k:35028**

Tredinger, Neil S. On the positivity of weak supersolutions of nonuniformly elliptic equations. **80i:35057**

Zhang, Wei Tao (*with* Gu, Yong Geng; Ji, Xin Hua) An integral identity for mean curvature. (Chinese. English summary) **80j:35024**

Secondary classifications:

Ancona, Alano Principe de Harnack à la frontière et théorème de Fatou pour un opérateur elliptique dans un domaine lipschitzien. (English summary) **(80d:31006)**

Bauer, Karl Wilhelm Zur iterierten Gleichung der verallgemeinerten axial-symmetrischen Potentialtheorie. (Russian summary) **(80h:35023)**

Bertiger, William Maximum principles, gradient estimates, and weak solutions for second-order partial differential equations. **(80g:35018)**

Burch, Charles C. The Dini condition and regularity of weak solutions of elliptic equations. **(80f:35027)**

Chaljub-Simon, Alice (*with* Choquet-Bruhat, Yvonne) Problèmes elliptiques du second ordre sur une variété euclidienne à l'infini. (English summary) **(80i:58044)**

Choquet-Bruhat, Yvonne *See* **Chaljub-Simon, Alice, (80i:58044)**

Feller, M. N. Solvability of infinite-dimensional elliptic equations with variable coefficients. (Russian) **(80d:35138)**

Giusti, Enrico (*with* Modica, Giuseppe) A note on regular points for solutions of elliptic systems. **(80m:35017)**

Himčenko, B. N. *See* **Kamynin, L. I., (80i:35023)** *and* **Kamynin, L. I., (80i:35024)**

Kamin, Shoshana On elliptic singular perturbation problems with turning points. **(80f:35011)**

Kamynin, L. I. (*with* Himčenko, B. N.) An isotropic strict extremum principle in a planar domain. (Russian) **(80i:35023)**

(*with* Himčenko, B. N.) The strict extremum principle for a D-(Φ, Ω)-elliptically connected second-order operator. (Russian) **(80i:35024)**

Modica, Giuseppe *See* **Giusti, Enrico, (80m:35017)**

Moss, William F. (*with* Piepenbrink, John) Positive solutions of elliptic equations. **(80b:35008)**

Philippin, Gérard A. A minimum principle for the problem of torsional creep. **(80f:73042)**

Piepenbrink, John *See* **Moss, William F., (80b:35008)**

Popov, M. M. (*with* Pšenčik, I.) Whispering gallery waves in the vicinity of the point of unbending of a concave boundary. (Russian. English summary) **(80g:78015)**

Pšenčik, I. *See* **Popov, M. M., (80g:78015)**

Roth, Jean-Pierre Les opérateurs elliptiques comme générateurs infinitésimaux de semi-groupes de Feller. **(80g:47052)**

Volkov, E. A. Smoothness of solutions of the Dirichlet problem, and the composite grid method on polyhedra. (Russian) **(80m:65067)**

35J20 Second-order equations, variational methods

Biroli, Marco A De Giorgi-Nash-Moser result for a variational inequality. (Italian summary) **80j:35025**

Caffarelli, Luis A. Further regularity for the Signorini problem. **80i:35058**

(*with* Friedman, Avner) The free boundary for elastic-plastic torsion problems. **80i:35059**

Chicco, Maurizio Existence and uniqueness of the solution of a variational inequality that is associated to an elliptic second-order operator with discontinuous coefficients. (Italian) **80e:35019**

Chipot, Michel Sur la régularité de la solution d'inéquations variationnelles elliptiques. (English summary) **80d:35042**

Cimatti, G. A nonlinear elliptic eigenvalue problem for the Elenbaas equation. (Italian summary) **80m:35040**

Evans, Lawrence C. A second-order elliptic equation with gradient constraint. **80m:35025a**

Correction to: "A second-order elliptic equation with gradient constraint" [Comm. Partial Differential Equations 4 (1979), no. 5, 555–572; MR 80m:35025a]. **80m:35025b**

Friedman, Avner *See* **Caffarelli, Luis A., 80i:35059**

Fujiwara, Daisuke A remark on the Hadamard variational formula. **80i:35060**

Giaquinta, Mariano (*with* Modica, Giuseppe; Souček, J.) Functionals with linear growth in the calculus of variations. I, II. **80b:35047**

Iordanov, Iordan V. Deux notes sur quelques inéquations variationnelles elliptiques. **80b:35041**

Lavery, J. E. A posteriori error bounds for linear elliptic equations of potential type. **80i:35061**

Modica, Giuseppe *See* **Giaquinta, Mariano; et al., 80b:35047**

Payne, L. E. (*with* Sperb, René; Stakgold, Ivar) On Hopf type maximum principles for convex domains. **80m:35026**

Platone Garroni, Maria Giovanna (*with* Vivaldi, Maria Agostina) Existence, regularity and dual estimates for the solution of a quasivariational inequality relative to a quasilinear operator. (Italian. English summary) **80i:35062**

Souček, J. *See* **Giaquinta, Mariano; et al., 80b:35047**

Sperb, René *See* **Payne, L. E.; et al., 80m:35026**

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Vivaldi, Maria Agostina *See* **Platone Garroni, Maria Giovanna, 80i:35062**

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Biroli, Marco G-convergence for elliptic equations, variational inequalities and quasi-variational inequalities. (Italian summary) **(80d:49008)**

Brézis, Haïm The Hamilton-Jacobi-Bellman equation for two operators via variational inequalities. **(80f:49004)**

(*with* Evans, Lawrence C.) A variational inequality approach to the Bellman-Dirichlet equation for two elliptic operators. **(80e:49021)**

Desperat, Tadeusz Boundary value problems with a free boundary in the theory of stationary filtration. (Polish) **(80d:76088)**

Evans, Lawrence C. *See* **Brézis, Haïm, (80e:49021)**

Fix, George J. Variational methods for elliptic boundary value problems. **(80k:65088)**

Halphen, Bernard Sur les discontinuités de vitesse en élastoplasticité. (English summary) **(80a:73031)**

Hanouzet, Bernard (*with* Joly, Jean-Luc) Régularité $W^{2,p}$ pour une I.Q.V. avec conditions de Neumann. **(80h:49006)**

Hlaváček, Ivan Dual finite element analysis for semi-coercive unilateral boundary value problems. **(80c:65207)**

Joly, Jean-Luc *See* **Hanouzet, Bernard, (80h:49006)**

Miersemann, Erich Über positive Lösungen von Eigenwertgleichungen mit Anwendungen auf elliptische Gleichungen zweiter Ordnung und auf ein Beulproblem für die Platte. (English and Russian summaries) **(80d:35122)**

35J25 Second-order equations, boundary value problems

Acanfora, Fausto The exterior Dirichlet problem for a class of elliptic second-order equations. (Italian. English summary) **80k:35029**

Ahner, John F. The exterior Robin problem for the Helmholtz equation. **80a:35031**

Bandle, Catherine Estimates for the Green's functions of elliptic operators. **80c:35027**

Bensoussan, Alain (*with* Lions, Jacques-Louis; Papanicolaou, George C.) Homogenization of operators not in divergence form. **80c:35028**

Bogaenko, I. N. (*with* Timofeev, Ju. A.) Solution of the third boundary value problem for equations of elliptic type. I. (Russian) **80f:35043**

Bonacini, Riccardo (*with* Marchetti, Elena) The sign of the solution to a nonhomogeneous Dirichlet problem. I. (Italian) **80j:35026a**

(*with* Marchetti, Elena) The sign of the solution to an inhomogeneous Dirichlet problem. II. (Italian) **80j:35026b**

Bony, Jean-Michel Prolongement à la frontière des solutions du problème des dérivées obliques. **80f:35044**

Brauner, Claude-Michel (*with* Nicolaenko, Basil) Sur des problèmes aux valeurs propres non linéaires qui se prolongent en problèmes à frontière libre. (English summary) **80b:35048**

Canavati A., José A. (*with* Minzoni, Antonmaría A.) A discontinuous Steklov problem with an application to water waves. **80h:35042**

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Dem'janovič, L. N. Estimate of the solution of an elliptic problem. (Russian) **80d:35043**

Feistauer, Miloslav Solution of elliptic problem with not fully specified Dirichlet boundary value conditions and its application in hydrodynamics. (Czech summary) **80c:35029**

Gabov, S. A. (*with* Svešnikov, A. G.) Applications of angular potential. Solution of problems of the diffraction of tide waves. (Russian) **80i:35063**

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Hanouzet, Bernard (*with* Joly, Jean-Luc) Convergence uniforme des itérés définissant la solution d'une inéquation quasi variationnelle abstraite. (English summary) **80a:35032**

Ivanov, S. V. Application of the factorization method to the solution of an exterior boundary value problem in the presence of boundary conditions of the third kind with a piecewise-constant coefficient on a spherical surface. (Russian) **80c:35030**

Joly, Jean-Luc *See* **Hanouzet, Bernard, 80a:35032**

Kamin, Shoshana Elliptic perturbation of a first-order operator with a singular point of attracting type. **80h:35044**

On elliptic equations with a small parameter in the highest derivative. **80i:35065**

Kapanadze, Dž. V. The regularity of a point for the Dirichlet problem and the fine topology. (Russian) **80d:35044**

Khelif, Abdelkader Problèmes aux limites pour le laplacien dans un domaine à points cuspides. (English summary) **80b:35050**

König, Manfred Über das Verhalten der Lösung des Dirichletproblems am Rand des Gebietes, wenn der Rand zur Klasse $C^{2,\alpha}$ gehört. (English summary) **80i:35066**

Koval'ov, V. F. The Dirichlet problem for certain domains with rectilinear boundaries. (Russian) **80d:35045**

Krupskaja, D. A. On the modulus of continuity for the generalized solution to the Dirichlet problem for a degenerate elliptic equation of second order in the neighbourhood of a regular boundary point. (Russian. English summary) **80b:35045**

Landis, E. M. Nonessential sets for the Dirichlet problem. (Russian) **80m:35027**

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Mixed boundary value problems for nonvariational elliptic equations on a polygon. (Italian summary) **80g:35046**

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Magnaghi-Delfino, Paola (*with* Paparoni, Eva) A transmission problem in an angle. (Italian. English summary) **80d:35046**

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Nikiškin, V. A. Singularities of the solution of the Dirichlet problem for a second-order equation in the neighborhood of an edge. (Russian. English summary) **80h:35046**

Nirenberg, Louis *See* **Gidas, Basilis; et al., 80h:35043**

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Phan The Lai Problème de Dirichlet dans un cône avec paramètre spectral pour une classe d'espaces de Sobolev à poids. **80j:35028**

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Schol-Cancelier, Claudy Unicité dans $L^\infty(\Omega)$ de la solution faible du problème de Dirichlet et construction de semi-groupes de Feller. (English summary) **80b:35052**

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Šiškov, A. Ē. A nonlinear boundary value problem for a quasilinear elliptic equation. (Russian) **80m:35028**

See also **Skripnik, Ī. V., 80a:35035**

Skripnik, Ī. V. (*with* Šiškov, A. Ē.) Solutions of the Dirichlet problem that are regular in a closed domain for the Monge-Ampère equations. (Russian) **80a:35035**

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Čeredničenko, V. G. Determination of the density of a body from the given potential of an elliptic equation. (Russian) **(80c:35097)**

Chiti, Giuseppe Orlicz norms of the solutions of a class of elliptic equations. (Italian. English summary) **(80h:35004)**

Cohen, Jeffrey S. (*with* Papadakis, John S.) An addition formula for Green's functions. **(80b:35027)**

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Kesavan, Srinivasan Homogenization of elliptic eigenvalue problems. I. (French summary) **(80f:65111)**

Lions, Jacques-Louis A remark on certain computational aspects of the homogenization method in composite materials. (Russian) **(80h:35026)**

See also **Bensoussan, Alain; et al., (80g:35127)**

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Moreau, R. *See* **Alemany, A., (80d:76097)**

Papadakis, John S. *See* **Cohen, Jeffrey S., (80b:35027)**

Papanicolaou, George C. *See* **Bensoussan, Alain; et al., (80g:35127)**

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Raviart, Pierre-Arnaud (*with* Thomas, Jean Marie) Dual finite element models for second order elliptic problems. **(80j:65034)**

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35J30 Higher-order equations, general

Arakčeev, S. A. Some classes of linear and quasilinear elliptic equations with summable coefficients. (Russian) **80b:35053**

Díaz, J. B. (*with* Ram, R. B.) A reflection principle for a fourth-order partial differential equation which is related to the biharmonic equation. **80k:35031**

Frank, Leonid S. Singular elliptic perturbations. (Italian. English summary) **80j:35030**

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35J35 Higher-order equations, variational methods

Biroli, Marco An estimate on convergence for a homogenisation problem for variational inequalities. **80i:35070**

G-convergence for elliptic variational and quasivariational inequalities. **80i:35071**

Bock, Igor Lower estimate of the minimum of energy functional by means of the duality theorem. (Slovak and Russian summaries) **80h:35050**

Caffarelli, Luis A. (*with* Friedman, Avner) The obstacle problem for the biharmonic operator. **80g:35049**

Friedman, Avner *See* **Caffarelli, Luis A., 80g:35049**

Nikol'skiĭ, S. M. A variational problem for an equation of elliptic type with degeneration on the boundary. (Russian) **80j:35031**

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35J40 Higher-order equations, boundary value problems

Agapova, T. M. Estimates of the solutions of the Neumann problem for quasilinear elliptic equations of arbitrary order. (Russian) **80m:35029**

Alvino, Angelo (*with* Trombetti, Guido) The Dirichlet problem in a cone of $\mathbf{R}^n$ in L^p. (Italian. English summary) **80k:35032**

Avantaggiati, Antonio Elliptic boundary value problems in open sets of $\mathbf{R}^n$ that have conical points. (Italian. English summary) **80g:35050**

Čan Dyk Van (*with* Korzjuk, V. I.) The normal solvability of conjugation problems for elliptic equations. (Russian. English summary) **80g:35051**

Černomaz, V. N. On the problem of homotopic classification of multidimensional elliptic systems. (Russian) **80k:35033**

Ėidel'man, S. D. *See* **Kondrat'ev, V. A., 80j:35032**

Esposito, Vincenzo A bound for the gradient of the solutions of an elliptic fourth-order equation. (Italian. English summary) **80k:35034**

Fujiwara, Daisuke (*with* Ozawa, Shin) The Hadamard variational formula for the Green functions of some normal elliptic boundary value problems. **80d:35048**

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Hoang Kuok Toan *See* **Kotko, L. A., 80f:35048**

Iosif'jan, G. A. *See* **Oleinik, O. A.; et al., 80b:35057**

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Mahmudov, M. D. Small-parameter asymptotics of the solution of a boundary value problem for elliptic equations of order $2m$ in a thin infinite layer. (Russian. Azerbaijani and English summaries) **80i:35073**

Makarov, V. L. (*with* Skorobagat'ko, A. A.) Solution of boundary value problems for a generalized biharmonic equation in unbounded domains. (Russian. English summary) **80d:35049**

Matarasso, Silvano Elliptic problems on the plane in Sobolev spaces with a weight. (Italian) **80f:35049**

(*with* Troisi, Mario) Elliptic differential operators in Sobolev spaces with a weight. (Italian) **80k:35035**

Mumm, Harald (*with* Wildenhain, Günther) Zur Darstellung der Lösung allgemeiner elliptischer Randwertprobleme. **80b:35054**

Nazarov, S. A. Asymptotic behavior with respect to a small parameter of the solution of an elliptic boundary value problem in a domain with a conical point. (Russian) **80b:35055**

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Oleinik, O. A. (*with* Iosif'jan, G. A.; Tahvelidze, I. N.) Estimates of the solutions of a biharmonic equation in the neighborhood of irregular points on the boundary or at infinity. (Russian) **80b:35057**

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Prohorova, A. V. Noethericity of Šilov-Lopatinskiĭ problems for elliptic equations in a noncompact domain. (Russian) **80g:35052**

Rhee, H. *See* **Walter, Wolfgang, 80l:35074**

Schaefer, Philip W. Uniqueness in some higher order elliptic boundary value problems. (German summary) **80a:35039**

(*with* Walter, Wolfgang) On pointwise estimates for metaharmonic functions. **80f:35050**

Ševčenko, V. Ì. *See* **Le Hyu Zien, 80a:35038**

Šiškov, A. Ē. *See* **Skripnik, Ì. V., 80f:35051**

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Theocaris, Pericles S. *See* **Tsamasphyros, G. J., 80e:35020**

Troisi, Mario *See* **Matarasso, Silvano, 80k:35035**

Trombetti, Guido *See* **Alvino, Angelo, 80k:35032**

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Wildenhain, Günther *See* **Mumm, Harald, 80b:35054**

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Beyn, Wolf-Jürgen Schwach majorisierende Elemente und die besonderen Monotonie-Eigenschaften von Randwertaufgaben zweiter Ordnung. (English summary) **(80h:34015)**

Clasen, Ute (*with* Wildenhain, Günther) Approximation durch biharmonische Potentiale. **(80b:31007)**

Copson, E. T. Electrostatics in a gravitational field. **(80f:83004)**

Fokt, O. S. Estimates of the derivatives of the solutions of linear equations of elliptic type on E^n and related weighted imbedding theorems. I. (Russian) **(80m:46027a)**

Estimates of the derivatives of the solutions of linear equations of elliptic type on E^n and related weighted imbedding theorems. II. (Russian) **(80m:46027b)**

Martynenko, Mih. D. (*with* Šipka, Ì. G.) A boundary value problem for a metaharmonic fourth-order equation in regions with a gap. (Russian. English summary) **(80k:31003)**

Roitberg, Ja. A. (*with* Šefteľ, Z. G.) Optimal control of systems described by general elliptic problems. (Russian) **(80j:49008)**

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Šipka, Ì. G. *See* **Martynenko, Mih. D., (80k:31003)**

Wildenhain, Günther *See* **Clasen, Ute, (80b:31007)**

35J45 Systems, general

Bratti, Giuliano Solution of a conjecture of De Giorgi in $\mathbf{R}^2$. (Italian) **80m:35030**

Černomaz, V. N. (*with* Ševčenko, V. Ì.) Elliptic systems with eight independent variables. (Russian) **80f:35052**

Estimation of the number of connected components of a set of real elliptic systems of four and eight equations. (Russian. English summary) **80a:35040**

Hile, Gerald N. Elliptic systems in the plane with first-order terms and constant coefficients. **80d:35050**

Porru, Giovanni Maximum principles for some classes of linear second-order systems with degenerate ellipticity. (Italian. English summary) **80d:35051**

Safarov, D. H. The dimension of the space of solutions of power growth for a class of elliptic systems. (Russian) **80d:35052**

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Gogodze, I. K. Optimization of linear elliptic systems in conditions of indeterminacy. (Russian. Georgian and English summaries) **(80e:49017)**

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35J50 Systems, variational methods

Kato, Yoshio The coerciveness for integro-differential quadratic forms and Korn's inequality. **80d:35054**

Secondary classifications:

Alt, Hans Wilhelm Strömungen durch inhomogene poröse Medien mit freiem Rand. **(80d:76086)**

35J55 Systems, boundary value problems

Buonocore, Pasquale Existence and uniqueness in a half-space for normal problems with respect to t-homogeneous quasi-elliptic systems with constant coefficients. (Italian. English summary) **80c:35032**

Chrząszczyk, Andrzej On existence and uniqueness problem of generalized solutions for nonlinear system of differential equations. (Russian summary) **80j:35033**

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The multidimensional analogue of A. V. Bicadze's system. (Russian) **80a:35043**

Kovalenko, Ì. P. (*with* Roĭtberg, Ja. A.; Šefteľ, Z. G.) The Green function of general inhomogeneous boundary value problems for systems elliptic in the sense of Douglis and Nirenberg. (Russian) **80c:35033**

Le Hyu Zien Topological classification of general boundary value problems in the plane for systems which are elliptic in the sense of Petrovskiĭ. (Russian. English summary) **80j:35034**

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The reduction of elliptic boundary value problems to elliptic systems of pseudodifferential equations on the boundary of the domain. (Russian) **80m:35031**

Roĭtberg, Ja. A. *See* **Kovalenko, Ì. P.; et al., 80c:35033**

Rutkauskas, S. The Dirichlet problem for a system of elliptic equations with a high order of degeneracy. (Russian. Lithuanian and German summaries) **80c:35034**

Šefteľ, Z. G. *See* **Kovalenko, Ì. P.; et al., 80c:35033**

Sitnikova, E. G. A lemma on the growth for elliptic systems. (Russian) **80e:35021**

Vasil'eva, G. V. On the Dirichlet problem for a multidimensional analogue of the A. V. Bicadze system. (Russian) **80h:35052**

On the Dirichlet problem for a multidimensional elliptic system. (Russian) **80g:35054**

Vološina, M. S. (*with* Gupalo, A. S.; Lopušans'ka, G. P.) A generalized Dirichlet problem for a class of strongly elliptic systems of differential equations in the case of a multiply connected domain. (Russian) **80k:35037**

Wendland, Wolfgang On a class of semilinear boundary value problems for certain elliptic systems in the plane. (Russian summary) **80c:35035**

★Elliptic systems in the plane. **80h:35053**

Yu, Chung Ling Generalized conjugate function theorems for solutions of first-order elliptic systems on the plane. **80d:35055**

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Mišnjakov, N. T. (*with* Nikolaičuk, A. M.) Noether's theory for a general boundary value problem with Carleman shift and conjugation in a class of generalized analytic functions. (Russian) **80k:30042**

Natrolvili, D. G. ★Оценки тензоров Грина теории упругости и некоторые их приложения. (Russian) [Estimates of Green's tensors of elasticity theory and their applications] **(80a:73019)**

Nikolaičuk, A. M. *See* **Mišnjakov, N. T., (80k:30042)**

Protter, M. H. The generalized spectrum of second-order elliptic systems. **(80d:35117)**

35J60 Nonlinear equations and systems

Amann, Herbert (*with* Hess, Peter) A multiplicity result for a class of elliptic boundary value problems. **80m:35032**

Bandle, Catherine (*with* Marcus, Moshe) Un théorème de comparaison pour un problème elliptique avec une non-linéarité singulière. (English summary) **80i:35075**

Barnsley, Michael F. (*with* Bessis, D.) Padé approximant bounds on the positive solutions of some nonlinear elliptic equations. **80a:35045**

Berestycki, Henri (*with* Lions, Pierre-Louis) Existence d'ondes solitaires dans des problèmes nonlinéaires du type Klein-Gordon. (English summary) **80i:35076**

Bessis, D. *See* **Barnsley, Michael F., 80a:35045**

Campanato, Sergio Partial Hölder continuity of the gradient of solutions of some nonlinear elliptic systems. **80h:35054**

Čan Dyk Van Sobolev spaces of infinite order with weight in a strip, and the solvability of boundary value problems for degenerate nonlinear elliptic equations. (Russian) **80a:35046**

Dancer, E. N. On the ranges of certain weakly nonlinear elliptic partial differential equations. **80g:35055**

Evans, Lawrence C. A convergence theorem for solutions of nonlinear second-order elliptic equations. **80e:35023**

Gärtner, Michael (*with* von Wahl, Wolf) Quasilineare elliptische Gleichungen höherer Ordnung. **80d:35056**

Ganqui, Jacques Sur l'existence locale d'immersions à courbure scalaire donnée. II. Le cas différentiable. **80i:35077**

Giaquinta, Mariano Nonlinear elliptic systems. Theory of regularity. (Italian. English summary) **80h:35055**

(*with* Nečas, Jindřich) On the regularity of weak solutions to nonlinear elliptic systems via Liouville's type property. **80g:35056**

(*with* Modica, Giuseppe) Almost-everywhere regularity results for solutions of nonlinear elliptic systems. **80m:35033**

Hess, Peter *See* **Amann, Herbert, 80m:35032**

Horgan, C. O. (*with* Olmstead, W. E.) Exponential decay estimates for a class of nonlinear Dirichlet problems. **80i:35078**

Kirchgässner, Klaus (*with* Scheurle, Jürgen) On the bounded solutions of a semilinear elliptic equation in a strip. **80e:35024**

Knops, R. J. (*with* Payne, L. E.) Uniqueness and continuous dependence of the null solution in the Cauchy problem for a nonlinear elliptic system. **80g:35057**

Lawson, H. Blaine, Jr. (*with* Osserman, Robert) Non-existence, non-uniqueness and irregularity of solutions to the minimal surface system. **80b:35059**

Lions, Pierre-Louis *See* **Berestycki, Henri, 80i:35076**

Marcus, Moshe *See* **Bandle, Catherine, 80i:35075**

Martić, Branislav On some systems of partial differential equation and on some classes of nonanalytic functions. (Serbo-Croatian summary) **80i:35079**

McKenna, P. J. Uniqueness of solutions for semilinear equations at resonance. **80c:35036**

Modica, Giuseppe *See* **Giaquinta, Mariano, 80m:35033**

Mustonen, Vesa A class of strongly nonlinear variational inequalities in unbounded domains. **80g:35058**

Naas, Josef (*with* Tutschke, Wolfgang) Some probabilistic aspects in partial complex differential equations. (Russian summary) **80b:35060**

Nečas, Jindřich *See* **Giaquinta, Mariano, 80g:35056**

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Payne, L. E. (*with* Philippin, Gérard A.) Some maximum principles for nonlinear elliptic equations in divergence form with applications to capillary surfaces and to surfaces of constant mean curvature. **80h:35056**

See also **Knops, R. J., 80g:35057**

Philippin, Gérard A. *See* **Payne, L. E., 80h:35056**

Saut, Jean-Claude (*with* Temam, Roger) Generic properties of nonlinear boundary value problems. **80i:35080**

Scheurle, Jürgen *See* **Kirchgässner, Klaus, 80e:35024**

Stuart, Charles A. Maximal and minimal solutions of elliptic differential equations with discontinuous nonlinearities. **80g:35059**

Temam, Roger *See* **Saut, Jean-Claude, 80i:35080**

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Vaugon, Michel Équations différentielles non linéaires sur les variétés riemanniennes compactes. (English summary) **80i:35081**

von Wahl, Wolf Existenzsätze für nichtlineare elliptische Systeme. **80d:35057**

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Attouch, Hédy Convergence des solutions d'inéquations variationnelles avec obstacle. **(80g:35010)**

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Babin, A. V. Fractional powers of a nonlinear analytic differential operator. (Russian) **(80k:47083)**

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Canfora, Albino Extension and application of a surjectivity theorem of Fučik. (Italian) **(80h:35095)**

de Figueiredo, Djairo G. (*with* Lions, Pierre-Louis; Nussbaum, Roger D.) Estimations a priori pour les solutions positives de problèmes elliptiques superlinéaires. (English summary) **(80m:35013)**

Finn, Robert Existence and nonexistence of capillary surfaces. **(80f:58044a)**

(*with* Giusti, Enrico) Nonexistence and existence of capillary surfaces. **(80f:58044b)**

Giusti, Enrico *See* **Finn, Robert, (80f:58044b)**

Granlund, Seppo Strong maximum principle for a quasi-linear equation with applications. **(80a:35017)**

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Kitamura, Yuichi (*with* Kusano, Takaši) Nonlinear oscillation of a fourth-order elliptic equation. **(80d:35010)**

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Langenbach, Arno ★Monotone Potentialoperatoren in Theorie und Anwendung. **(80d:47081)**

Lions, Pierre-Louis *See* **de Figueiredo, Djairo G.; et al., (80m:35013)**

Mancini, Giovanni *See* **Amann, Herbert, (80k:47072)** *and* **Ambrosetti, Antonio, (80k:47073)**

Mikljukov, V. M. A new approach to the Bernšteĭn theorem and to related questions of equations of minimal surface type. (Russian) **(80e:53005)**

Modica, Luciano Γ-convergence to minimal surfaces problem and global solutions of $\Delta u = 2(u^3 - u)$. **(80g:49042)**

Morlyón, Roberto Regularity of the Dirichlet problem for the complex Monge-Ampère equation. **(80i:32051)**

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Nussbaum, Roger D. *See* **de Figueiredo, Djairo G.; et al., (80m:35013)**

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(*with* Williams, David N.) Topics on Euclidean classical field equations with unique vacuua. **(80k:81134)**

Serre, Denis Prolongement analytique d'une branche de solutions d'une équation aux dérivées partielles non linéaire paramétrée. Applications. (English summary) **(80h:35011)**

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35J65 Nonlinear boundary value problems for linear equations and systems; boundary value problems for nonlinear equations and systems

Amann, Herbert (*with* Crandall, Michael G.) On some existence theorems for semi-linear elliptic equations. **80a:35047**

Nichtlineare Randwertprobleme. **80d:35058**

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(*with* Hess, Peter) Pairs of solutions for some nonlinear elliptic equations. (Italian summary) **80m:35034**

Amosov, A. A. The limit connection between two problems of radiation heat transfer. (Russian) **80b:35058**

Benci, Vieri (*with* Fortunato, Donato) Some nonlinear elliptic problems with asymptotic conditions. **80d:35060**

Bose, Deb Kumar On semilinear elliptic boundary value problems in unbounded domains. **80b:35061**

Brézis, Haim (*with* Browder, Felix E.) Strongly nonlinear elliptic boundary value problems. **80d:35061**

Browder, Felix E. *See* **Brézis, Haim, 80d:35061**

Brown, K. J. (*with* Lin, S. S.) Monotone techniques and semilinear elliptic boundary value problems. **80i:35082**

Calvert, Bruce D. (*with* Gupta, Chaitan P.) Nonlinear elliptic boundary value problems in L^p-spaces and sums of ranges of accretive operators. **80i:35063**

Castro, Alfonso A semilinear Dirichlet problem. **80d:35062**

Crandall, Michael G. *See* **Amann, Herbert, 80a:35047**

Edmunds, D. E. (*with* Mustonen, Vesa) A priori estimates for positive solutions of strongly nonlinear equations in two variables. **80b:35059**

de Figueiredo, Djairo G. (*with* Gossez, Jean-Pierre) Nonlinear perturbations of a linear elliptic problem near its first eigenvalue. **80f:35053**

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Gerhardt, Claus Boundary value problems for surfaces of prescribed mean curvature. **80g:35061**

Gonçalves, José Valdo Abreu An existence theorem for quasilinear elliptic equations at resonance. **80j:35035**

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Kawohl, Bernhard Coerciveness for second-order elliptic differential equations with unilateral constraints. **80a:35049**

Kinderlehrer, David (*with* Nirenberg, Louis; Spruck, Joel) Régularité dans les problèmes elliptiques à frontière libre. (English summary) **80a:35050**

Klimov, V. S. Solvability of the Dirichlet problem in Orlicz-Sobolev spaces. (Russian) **80k:35038**

Koichev, A. I. Smoothness of solutions of second-order quasilinear elliptic systems. (Russian) **80i:35084**

Krasnov, Ja. A. Solution of a class of nonlinear boundary value problems. (Russian) **80b:35062**

Landes, Rüdiger Two existence theorems for nonlinear elliptic equations. **80b:35060**

Quasilinear elliptic operators and weak solutions of the Euler equation. **80i:35085**

Lin, S. S. *See* **Brown, K. J., 80i:35082**

Luckhaus, Stephan Existence and regularity of weak solutions to the Dirichlet problem for semilinear elliptic systems of higher order. **80d:35063**

Mancini, Ivar Positive eigenvalues for elliptic equations with discontinuous nonlinearities. (Italian summary) **80a:35051**

McKenna, P. J. On a superlinear elliptic boundary value problem at resonance. **80c:35037**

Mignot, F. (*with* Puel, J.-P.) Sur une classe de problèmes non linéaires avec non linéarité positive croissante, convexe. **80f:35054**

Mustonen, Vesa An elliptic boundary value problem for strongly non-linear equations in unbounded domains. **80b:35063**

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Najmi, Mohamed Résolution d'un problème de Dirichlet fortement non linéaire dans un domaine non régulier. (English summary) **80c:35038**

Nirenberg, Louis *See* **Kinderlehrer, David; et al., 80a:35050**

Platone Garroni, Maria Giovanna (*with* Troianiello, Giovanni Maria) Some regularity results and a priori estimates for solutions of variational and quasi-variational inequalities. A survey. **80g:35060**

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Schmitt, Klaus Boundary value problems for quasilinear second-order elliptic equations. **80b:35064**

Serre, Denis Prolongement analytique et nombre de solutions d'une équation aux dérivées partielles elliptique non linéaire paramétrée. (English summary) **80a:35052**

Skripnik, I. V. Higher order quasilinear elliptic equations with continuous generalized solutions. (Russian) **80a:35053**

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Sukiasyan, N. M. The behavior of the solutions of the Dirichlet problem for nonlinear elliptic equations in infinite domains. (Russian) **80e:35025**

The behavior of the solutions of the Dirichlet problem for nonlinear elliptic equations in unbounded domains. (Russian) **80a:35054**

Thews, Klaus Multiple solutions for elliptic boundary value problems with odd nonlinearities. **80d:35064**

Tjurikov, E. V. A Hilbert nonlinear boundary value problem for quasilinear elliptic systems. (Russian) **80k:35039**

Tricarico, Mariarosaria Nonlinear perturbations for a class of elliptic-parabolic operators of order $2m$. (Italian) **80a:35055**

Troianiello, Giovanni Maria *See* **Platone Garroni, Maria Giovanna, 80g:35060**

von Wahl, Wolf Die stationären Gleichungen von Navier-Stokes und semilineare elliptische Systeme. **80f:35055**

Über die stationären Gleichungen von Navier-Stokes, semilineare elliptische und parabolische Gleichungen. **80k:35061**

Webb, J. R. L. Strongly nonlinear elliptic equations. **80b:35065**

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Balakova, G. S. Some extension theorems in a Sobolev space of infinite order, and inhomogeneous boundary value problems. (Russian) **(80b:46040)**

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(*with* Church, P. T.) Complete integrability and perturbation of a nonlinear Dirichlet problem. I. **(80k:58097)**

Brauner, Claude-Michel (*with* Nicolaenko, Basil) Sur des problèmes aux valeurs propres non linéaires qui se prolongent en problèmes à frontière libre. (English summary) **(80b:35048)**

(*with* Nicolaenko, Basil) Sur des problèmes aux valeurs propres non linéaires qui se prolongent en problèmes à frontière libre. (English summary) **(80g:35102)**

Church, P. T. *See* **Berger, Melvyn S., (80k:58097)**

Fitzpatrick, P. M. (*with* Petryshyn, Walter V.) On the nonlinear eigenvalue problem $T(u)=\lambda C(u)$, involving noncompact abstract and differential operators. (Italian summary) **(80b:47083)**

Fonarev, A. A. The solution of nonlinear equations with monotone transformations. (Russian) **(80i:47088)**

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Ivočkina, N. M. *See* **Žukova, O. I., (80k:35016)**

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Jonsson, T. (*with* McBryan, O.; Zirilli, Francesco; Hubbard, J.) An existence theorem for multimeron solutions to classical Yang-Mills field equations. **(80k:81100)**

Kirchgässner, Klaus Periodic solutions of semilinear elliptic equations in a strip. **(80c:35008)**

Klimov, V. S. The number of solutions to boundary value problems of the nonlinear theory of shells. (Russian) **(80i:73055)**

Mancini, Ivar (*with* Stuart, Charles A.) Elliptic eigenvalue problems with discontinuous nonlinearities. **(80f:35102)**

McBryan, O. *See* **Jonsson, T.; et al., (80k:81100)**

Milojević, P. S. Some generalizations of the first Fredholm theorem to multivalued A-proper mappings with applications to nonlinear elliptic equations. **(80a:47098)**

Nicolaenko, Basil *See* **Brauner, Claude-Michel, (80b:35048)** *and* **Brauner, Claude-Michel, (80g:35102)**

Pavlenko, V. N. Nonlinear equations with discontinuous operators in Banach spaces. (Russian) **(80k:47059)**

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Schmitt, Klaus (*with* Thompson, Russell C.; Walter, Wolfgang) Existence of solutions of a nonlinear boundary value problem via the method of lines. **(80i:65132)**

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Thompson, Russell C. *See* **Schmitt, Klaus; et al., (80i:65132)**

Walter, Wolfgang *See* **Schmitt, Klaus; et al., (80i:65132)**

Williams, Graham H. The equivalence of some variational problems for surfaces of prescribed mean curvature. **(80j:49039)**

Zirilli, Francesco *See* **Jonsson, T.; et al., (80k:81100)**

Žukova, O. I. (*with* Ivočkina, N. M.) A priori boundedness of the gradient of the solution to the Dirichlet problem for nonuniformly elliptic equations at interior points of the domain. (Russian) **(80k:35016)**

35J67 Boundary values of solutions

Guščin, A. K. (*with* Mihailov, V. P.) Boundary values in L_p, $p>1$, of solutions of elliptic equations. (Russian) **80g:35062**

Ladevèze, J. (*with* Ladevèze, P.) Majorations de la constante de Poincaré relative au problème de la membrane domaines étoilés. **80a:35056**

Ladevèze, P. *See* **Ladevèze, J., 80a:35056**

Maz'ja, V. G. Behaviour of solutions to the Dirichlet problem for the biharmonic operator at a boundary point. **80e:35026**

Mihailov, V. P. *See* **Guščin, A. K., 80g:35062**

Roitberg, Ja. A. The existence of limit values of generalized solutions of elliptic equations on the boundary of the domain. (Russian) **80b:35062**

Šaripov, N. Regularity of boundary points for second-order linear elliptic equations in relation to the Dirichlet problem. (Russian) **80j:35037**

Schmidt, E. J. P. Georg (*with* Weck, Norbert) On the boundary behavior of solutions to elliptic and parabolic equations—with applications to boundary control for parabolic equations. **80d:35065**

Weck, Norbert *See* **Schmidt, E. J. P. Georg, 80d:35065**

Secondary classifications:

König, Manfred Über das Verhalten der Lösung des Dirichletproblems am Rand des Gebietes, wenn der Rand zur Klasse $C^{2,\alpha}$ gehört. (English summary) **(80i:35066)**

Nagai, Toshitaka Estimates for the coincidence sets of solutions of elliptic variational inequalities. **(80g:49015)**

Rippon, P. J. On the boundary behaviour of Green potentials. **(80e:31003)**

35J70 Equations and systems of degenerate type

Alvino, Angelo (*with* Trombetti, Guido) The best majorization constants for a class of degenerate elliptic equations. (Italian) **80k:35040**

Bertiger, William (*with* Cosner, Chris) Systems of second-order equations with nonnegative characteristic form. **80k:35063**

Cooper, Frances On the regularity of solutions to quasi-linear variational inequalities of degenerate elliptic type. **80b:35066**

Cosner, Chris *See* **Bertiger, William, 80k:35063**

Devinatz, Allen On an inequality of Tosio Kato for degenerate-elliptic operators. **80j:35038**

Dinaburg, G. V. The Riquier problem for a degenerate equation. (Russian) **80d:35066**

Evsin, V. I. The Dirichlet problem for an elliptic equation with degeneration of order in the interior of the domain. (Russian) **80f:35056**

Fritz, Bernd Über eine Klasse singulärer elliptischer Differentialoperatoren im n-dimensionalen euklidischen Raum. **80j:35039**

Himčenko, B. N. *See* **Kamynin, L. I., 80b:35068**

Janulaitis, Algimantas ★Аналитическая теория эллиптических уравнений. (Russian) [The analytic theory of elliptic equations] **80k:35041**

Kamynin, L. I. Uniqueness of boundary value problems for a second-order degenerate elliptic equation. (Russian) **80b:35067**

(*with* Himčenko, B. N.) Local estimates, near the boundary, of the solutions of second- order equations with a nonnegative characteristic form. (Russian) **80b:35068**

Koulova, O. N. The three semicylinders theorem for the solutions of quasi-elliptic degenerate evolution systems of differential equations of Douglis-Nirenberg structure. (Russian) **80f:35057**

Langlais, Michel Solutions fortes pour des problèmes aux limites du second ordre dégénérés. **80f:35058**

Mandras, Franco The Dirichlet problem for a class of degenerate linear second- order elliptic equations of nonvariational type. (Italian. English summary) **80f:35059**

Miroliin, N. V. The exterior Dirichlet problem for a degenerate elliptic operator. (Russian) **80j:35040**

Pagani, Carlo Domenico Approximation of the solutions to the first boundary value problem for second-order equations with positive semidefinite characteristic forms. (Italian) **80j:35041**

Panejah, B. P. On the problem with oblique derivative. (Russian) **80k:35064**

Perru, Giovanni A degenerate fourth-order elliptic operator in variational form. (Italian. English summary) **80b:35069**

On a compactness theorem with respect to G-convergence for degenerate second-order elliptic operators. (Italian. English summary) **80g:35063**

Prévosto, Dominique Caractérisation des directions de croissance minimale pour une réalisation d'un problème elliptique dégénéré. (English summary) **80b:35070**

Trombetti, Guido *See* **Alvino, Angelo, 80k:35040**

Secondary classifications:

Himčenko, B. N. *See* **Kamynin, L. I., (80g:35065)**

Kamynin, L. I. (*with* Himčenko, B. N.) A strict extremum principle that is isotropic in a plane domain. (Russian) **(80g:35065)**

Langlais, Michel Solutions fortes pour une classe de problèmes aux limites du second ordre dégénérés. **(80j:35071)**

Nakano, Yoshisuke The mathematical descriptions of a moving boundary problem in an elliptic-parabolic system of partial differential equations in the hydrodynamics of porous media. **(80d:76093)**

35J99 None of the above, but in this section

Besjes, J. (*with* Martini, R.) A generalization of Hartogs theorem. **80c:35039**

Bogatyrev, V. A. Solvability of a nonlinear problem with free boundary. (Russian) **80j:35042**

Gabov, S. A. (*with* Vabiščevič, P. N.) Angular potential for a divergence elliptic operator. (Russian) **80f:35060**

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Kamynin, L. I. (*with* Himčenko, B. N.) A strict extremum principle for a weakly elliptically connected second-order operator. (Russian) **80g:35064**

Martini, R. *See* **Besjes, J., 80c:35039**

Strang, Gilbert *See* **Temam, Roger, 80b:35071**

Temam, Roger (*with* Strang, Gilbert) Existence de solutions relaxées pour les équations de la plasticité: étude d'un espace fonctionnel. (English summary) **80b:35071**

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(*with* Taylor, B. A.) Variational properties of the complex Monge-Ampère equation. II. Intrinsic norms. **(80j:32034)**

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Brezzi, Franco Nonstandard finite elements for fourth-order elliptic problems. **(80e:65098)**

Buzano, Ernesto Ellipticity of the linear model of Naghdi-Flügge-Lur'e-Byrne for elastic thin shells. (Italian summary) **(80j:73030)**

Černomaz, V. N. (*with* Ševčenko, V. I.) The problem of linear conjugation for a holomorphic vector in four-dimensional space. (Russian) **(80a:32004)**

Cocilte, Mario M. Singular perturbations for a quasi-elliptic problem with constant coefficients in a half-space. (Italian. English summary) **(80c:35010)**

Deblard, Amédée (*with* Gaveau, Bernard) Problème de Dirichlet pour l'équation de Lévi. (English summary) **(80f:32010)**

Dervieux, Alain *See* **Palmerio, Bernadette, (80b:49005)**

Eckhaus, Wiktor (*with* Moet, H. J. K.) Asymptotic solutions in free boundary problems of singularly perturbed elliptic variational inequalities. **(80c:49004)**

Fabes, E. B. (*with* Jodeit, M., Jr.; Rivière, Nestor M.) Potential techniques for boundary value problems on C^1-domains. **(80b:31006)**

Fornaess, John Erik *See* **Bedford, Eric, (80c:32017)**

Frehse, Jens Un problème variationnel bidimensionnel possédant des extrémales bornées et discontinues. (English summary) **(80k:49003)**

Gaveau, Bernard *See* **Deblard, Amédée, (80f:32010)**

Göpfert, Alfred Hadamard's and optimization-theoretical instability. **(80j:49015)**

Gordeziani, D. G. (*with* Samarskiĭ, A. A.) Some problems of the thermoelasticity of plates and shells, and the method of summary approximation. (Russian) **(80a:73050)**

Gubaidullin, K. A. *See* **Azovskiĭ, V. V., (80a:35086)**

Iskenderov, A. D. An inverse problem on the determination of the coefficients of an elliptic equation. (Russian) **(80b:35130)**

Janovský, Vladimír Regularity of mildly nonlinear variational inequalities. (Italian summary) **(80e:49006)**

Jodeit, M., Jr. *See* **Fabes, E. B.; et al., (80b:31006)**

Klimentov, S. B. Smoothness of the solutions of boundary value problems in the bending theory of surfaces of genus $p > 0$. (Russian) **(80m:53047)**

Kučmest, P. A. Floquet representation of the solutions of linear hypo-elliptic systems of partial differential equations. (Russian) **(80g:35038)**

Kvitko, A. N. On the theory of the Riemann boundary value problem for generalized analytic functions, in the case of a multiple contour on a plane. (Russian) **(80k:30041)**

Le Hung Son Eindeutigkeitseigenschaft eines Fortsetzungssatzes für verallgemeinerte analytische Funktionen mehrerer komplexer Variabler. **(80i:32018)**

Verfahren zur Fortsetzung verallgemeinerter analytischer Funktionen mehrerer komplexer Variabler. **(80i:32017)**

Lobo Hidalgo, Miguel (*with* Sanchez, Enrique) Sur certaines propriétés spectrales des perturbations du domaine dans les problèmes aux limites. **(80b:35108)**

McCoy, Peter A. Mean boundary value problems for a class of elliptic equations in E^3. **(80j:35013)**

Mihailov, L. G. Conditions for compatibility of a generalized Cauchy-Riemann system with many variables. (Russian. Tajiki summary) **(80h:32003)**

Varieties of solutions of a generalized Cauchy-Riemann system with several variables. (Russian. Tajiki summary) **(80h:32004)**

Moet, H. J. K. *See* **Eckhaus, Wiktor, (80c:49004)**

Nayar, B. M. Induced potential problem in three dimensions. II. Properties of the adjoint kernel. **(80b:31004)**

Negro, Angelo Some variational formulation of nonlinear magnetic field problems in multiply connected domains. (Italian summary) **(80e:78011)**

Palmerio, Bernadette (*with* Dervieux, Alain) Hadamard's variational formula for a mixed problem and an application to a problem related to a Signorini-like variational inequality. **(80b:49005)**

Radžabov, N. R. Elementary solutions and integral representations for a class of differential equations with n singular hyperplanes. (Russian) **(80d:35025)**

Rempel, Stephan (*with* Schulze, B.-W.) ★Elliptische Operatoren auf berandeten Mannigfaltigkeiten. **(80a:58037)**

Rivière, Nestor M. *See* **Fabes, E. B.; et al., (80b:31006)**

Sabel'fel'd, K. K. The application of sweeping and averaging operators for the construction of algorithms of the Monte Carlo method. (Russian) **(80m:65008)**

Sadovský, Zoltán The problem of long elastic thin plate panel of asymmetrical I cross section in pure bending. **(80a:73052)**

Samarskiĭ, A. A. *See* **Gordeziani, D. G., (80a:73050)**

Sanchez, Enrique *See* **Lobo Hidalgo, Miguel, (80b:35108)**

Schulze, B.-W. Elliptic boundary value problems for operators of a special form. (Russian) **(80f:58045)**

See also **Rempel, Stephan, (80a:58037)**

Ševčenko, V. I. *See* **Černomaz, V. N., (80a:32004)**

Simon, Jacques Regularité de la composée de deux fonctions et applications. (Italian summary) **(80h:46045)**

Štípl, M. On the maximum principle in the linear theory of elasticity. (Russian and Czech summaries) **(80a:73022)**

Swanson, R. C. Fredholm intersection theory and elliptic boundary deformation problems. I. **(80i:58024a)**

Fredholm intersection theory and elliptic boundary deformation problems. II. **(80i:58024b)**

Tartar, L. Estimation de coefficients homogénéisés. **(80i:35010)**

Taylor, B. A. *See* **Bedford, Eric, (80a:32011)** *and* **Bedford, Eric, (80j:32034)**

Toscano, Raffaele *See* **Biancardi, Mirella, (80m:35016)**

Williams, Graham H. Surfaces of prescribed mean curvature with inequalities on the boundary. **(80d:53006)**

v. Wolfersdorf, Lothar Necessary optimality conditions for control processes with singular integral equations and elliptic equations. **(80j:49026)**

Yamada, Naoki Estimates on the support of solutions of elliptic variational inequalities in bounded domains. **(80g:49017)**

35Kxx Parabolic equations and systems [See also 58G11.]

35K05 Heat equation

Bazalii, B. V. A proof for the existence of the solution of a two-phase Stefan problem. (Russian) **80k:35042**

Benzinger, Harold E. Perturbation of the heat equation. **80d:35067**

Caplński, M. A statistical approach to the heat equation. **80i:35086**

(*with* Szafirski, Bolesław; Woźniak, M.) Equivalence of two definitions of statistical solution of the heat equation. **80j:35043**

Deslauriers, Gilles (*with* Dubuc, Serge) Logconcavity of the cooling of a convex body. **80d:35068**

Dubuc, Serge *See* **Deslauriers, Gilles, 80d:35068**

Ellis, Richard S. (*with* Newman, Charles M.) Extensions of the maximum principle: exponential preservation by the heat equation. **80d:35069**

Hawlitschek, Kurt Green-Funktionen für Wärmeleiter mit beweglichen Rändern. (English summary) **80a:35057**

Ionkin, N. I. (*with* Moiseev, E. I.) A problem for a heat equation with two-point boundary conditions. (Russian) **80i:35087**

Jakubov, S. *See* **Kružkov, S. N., 80d:35070**

Kalaĭnikov, A. S. The heat equation with long-range action. (Russian) **80j:35044**

Kružkov, S. N. (*with* Jakubov, S.) Solvability of a class of problems with unknown boundary for the heat equation and behavior of the solutions as the time increases to ∞. (Russian) **80d:35070**

Moiseev, E. I. *See* **Ionkin, N. I., 80i:35087**

Newman, Charles M. *See* **Ellis, Richard S., 80d:35069**

Nogi, Tatsuo The Stefan problem. (Japanese) **80c:35040**

Saleĭ, S. V. Global solvability of a Stefan problem. (Russian. English summary) **80i:35088**

Sero-Guillaume, Oliver Problème à frontière libre de type Stefan. (English summary) **80b:35072**

Soppa, M. S. Uniqueness of a multicomponent thermal boundary layer in the case of a general diffusion matrix. (Russian) **80d:35071**

Szafirski, Bolesław *See* Capiński, M.; et al., **80j:35043**

Tait, R. J. Additional pseudosimilarity solutions of the heat equation in the presence of moving boundaries. **80j:35045**

Woźniak, M. *See* Capiński, M.; et al., **80j:35043**

Secondary classifications:

Bačoš, G. S. The synthesis of an optimal control of the heat conduction process. (Russian) **(80a:93086)**

Baumeister, Johann On the treatment of free boundary problems with the heat equation via optimal control. **(80h:35131)**

Berryman, James G. *See* Holland, Charles J., **(80g:82032)**

Carrassi, M. Linear heat equations from kinetic theory. (Italian and Russian summaries) **(80a:82029)**

Colton, David The approximation of solutions to the backwards heat equation by solutions of pseudoparabolic equations. **(80i:35007)**

(*with* Wimp, Jet) The construction of solutions to the heat equation backward in time. **(80k:35011)**

Holland, Charles J. (*with* Berryman, James G.) A nonlinear generalization of the heat equation arising in plasma physics. **(80g:82032)**

Keriner, R. The behavior of temperature fronts in media with nonlinear heat conductivity under absorption. (Russian. English summary) **(80f:80006)**

Kocsis, Paul Green's function for the heat equation as a limit of product integrals. **(80a:35020)**

Kopriński, Stefan An operational method for the Bessel heat equation. **(80m:35002)**

Maurer, R. N. *See* Oulton, D. B.; et al., **(80i:80006)**

Osmonova, Č. The optimality of a particular control in the problem of optimizing the process of thermoconductivity. (Russian) **(80e:93068)**

Oulton, D. B. (*with* Wollkind, D. J.; Maurer, R. N.) A stability analysis of a prototype moving boundary problem in heat flow and diffusion. **(80i:80006)**

Sachs, Ekkehard A parabolic control problem with a boundary condition of the Stefan-Boltzmann type. (German and Russian summaries) **(80a:49037)**

Tao, L. N. The analyticity of solutions of the Stefan problem. **(80i:35184)**

Watson, N. A. Thermal capacity. **(80b:31005)**

Positive thermic majorization of temperatures on infinite strips. **(80i:35031)**

Wimp, Jet *See* Colton, David, **(80k:35011)**

Winther, Ragnar Error estimates for a Galerkin approximation of a parabolic control problem. **(80a:49067)**

Wollkind, D. J. *See* Oulton, D. B.; et al., **(80i:80006)**

35K10 Second-order equations, general

Borisenko, A. D. Asymptotic behaviour of the solution of the Cauchy problem for an equation of parabolic type. (Russian. English summary) **80f:35061**

Himčenko, B. N. *See* Kamynin, L. I., **80g:35065** *and* Kamynin, L. I., **80h:35065**

Kamynin, L. I. (*with* Himčenko, B. N.) A strict extremum principle that is isotropic in a plane domain. (Russian) **80g:35065**

(*with* Himčenko, B. N.) The local behavior of the solution of a second-order parabolic equation near the lower cap of the parabolic boundary. (Russian) **80h:35065**

Korobčuk, I. V. Properties of the solutions of second order parabolic equations. (Russian) **80c:35041**

Krylov, N. V. Passage to the limit in parabolic Bellman equations. (Russian) **80h:35066**

Kulekeev, K. D. *See* Žumabekov, L. Ž., **80h:35067**

Lubowicz, Jadwiga A construction of the basic solution of the equation $\Delta u - \partial_t u - vu = 0$. **80e:35027**

Petruško, I. M. The behavior of solutions of parabolic equations near the boundary. (Russian) **80j:35046**

Stafney, James D. On uniqueness for certain parabolic partial differential equations. (Italian summary) **80a:35058**

Troianiello, Giovanni Maria On weak subsolutions for parabolic second-order operators. **80e:35028**

Wanka, Johanna Eigenschaften des parabolischen Potentials der Einfachschicht mit summierbarer Dichte. **80i:35089**

Žikov, V. V. A criterion of pointwise stabilization for second-order parabolic equations with almost periodic coefficients. (Russian) **80m:35036**

Žumabekov, L. Ž. (*with* Kulekeev, K. D.) Construction of the Green function of basic boundary value problems for the operator $\partial/\partial t - A\Delta$. (Russian) **80h:35067**

Secondary classifications:

Ames, W. F. *See* Turner, V. L., **(80j:92004)**

Arosio, Alberto Asymptotic behavior as $t \to +\infty$ of solutions of linear parabolic equations with discontinuous coefficients in a bounded domain. **(80f:35015)**

Bazalii, B. V. (*with* Šelepov, V. Ju.) The asymptotic behavior of the solution of a Stefan problem. (Russian. English summary) **(80b:35015)**

Ch'én, Wu Yung H^p spaces for solutions of parabolic equations by integral operators. **(80b:35026)**

Ehlaev, S. A uniqueness theorem of an inverse problem for an equation of parabolic type. (Russian) **(80c:35098)**

Kilbanov, M. V. A formulation of the inverse problem for a parabolic equation. (Russian) **(80j:35092)**

Kupcov, L. P. The mean value property and the maximum principle for second order parabolic equations. (Russian) **(80a:35018)**

Nambu, Takao Feedback stabilization for distributed parameter systems of parabolic type. **(80i:93051)**

Norando, Tullia The almost periodic solution of a variational inequality with an almost periodic obstacle. (Italian. English summary) **(80f:35009)**

Pierce, Alan Unique identification of eigenvalues and coefficients in a parabolic problem. **(80e:35066)**

Šelepov, V. Ju. *See* Bazalii, B. V., **(80b:35015)**

Spagnolo, Sergio Convergence de solutions d'équations d'évolution. **(80k:35001)**

Turner, V. L. (*with* Ames, W. F.) Two-sided bounds for linked unknown nonlinear boundary conditions of reaction-diffusion. **(80j:92004)**

Ušakov, V. I. The behavior of the solutions of the third mixed problem for second-order parabolic equations as $t \to \infty$. (Russian) **(80g:35017)**

Uzlov, A. E. Existence and uniqueness theorems for the solutions of inverse problems for second-order equations of parabolic type. (Russian) **(80c:35102)**

Watson, N. A. The rate of spatial decay of non-negative solutions of linear parabolic equations. **(80b:35023)**

35K15 Second-order equations, initial value problems

Brézis, Haïm (*with* Crandall, Michael G.) Uniqueness of solutions of the initial-value problem for $u_t - \Delta\varphi(u) = 0$. **80e:35029**

Caffarelli, Luis A. (*with* Friedman, Avner) Continuity of the density of a gas flow in a porous medium. **80i:35090**

Crandall, Michael G. *See* Brézis, Haïm, **80e:35029**

Friedman, Avner *See* Caffarelli, Luis A., **80i:35090**

Secondary classifications:

Douglis, Avron An approximate layering method for multidimensional nonlinear parabolic systems of a certain type. **(80i:65098)**

Èidel'man, S. D. *See* Porper, F. O., **(80g:35015)**

Ehlaev, S. A uniqueness theorem for an inverse problem for the heat equation. (Russian. Kazakh summary) **(80g:35123)**

Il'in, A. M. (*with* Nesterova, T. N.) Asymptotic behavior of the solution of the Cauchy problem for a certain quasilinear parabolic equation with a small parameter. (Russian) **(80b:35020)**

Nesterova, T. N. *See* Il'in, A. M., **(80b:35020)**

Porper, F. O. (*with* Èidel'man, S. D.) Asymptotic behavior of classical and generalized solutions of second-order one-dimensional parabolic equations. (Russian) **(80g:35015)**

Rasulov, M. A. Investigation of the convergence of the grid method for problems of nonlinear heat conduction with absorption (Cauchy problem). (Russian. Azerbaijani and English summaries) **(80m:35037)**

35K20 Second-order equations, boundary value problems

Al-Khafaji, Talib Solution of diffusion equation for *xyz*-geometry by Fourier expansions. (Arabic summary) **80h:35068**

Anosov, V. P. Classical solvability of the first boundary value problem for a parabolic equation in the case when the data of the problem depend continuously on the time. (Russian) **80j:35047**

Baderko, Elena Étude du problème de Dirichlet pour une équation $2p$-parabolique dans un domaine non cylindrique. (English summary) **80b:35073**

Borodin, M. A. (*with* Fel'genhauèr, U.) An axially symmetric single-phase Stefan problem. (Russian) **80h:35069**

Charrier, Pierre (*with* Troianiello, Giovanni Maria) On strong solutions to parabolic unilateral problems with obstacle dependent on time. **80j:35048**

Colton, David On reflection principles for parabolic equations in one space variable. **80e:35030**

Cooke, Charlie H. On the sufficiency of a numerical downstream continuation. **80g:35066**

Dubois, Roger-Marie Problème mixte pour opérateurs locaux, avec condition aux limites dépendant régulièrement du temps. (English summary) **80b:35074**

Èidel'man, S. D. *See* Porper, F. O., **80i:35093**

Eklund, Nell Generalized parabolic functions using the Perron-Wiener-Brelot method. **80c:35042**

Ewing, Richard E. The Cauchy problem for a linear parabolic partial differential equation. **80m:35038**

Fel'genhauèr, U. *See* Borodin, M. A., **80h:35069**

Hadeler, K. P. (*with* Rothe, Franz; Vogt, H.) Stationary solutions of reaction-diffusion equations. **80i:35091**

Ionkin, N. I. The stability of a problem in the theory of heat conduction with nonclassical boundary conditions. (Russian) **80i:35092**

Kerefov, A. A. Nonlocal boundary value problems for parabolic equations. (Russian) **80c:35043**

Kožanov, A. I. A boundary value problem for a class of nonuniformly parabolic equations arising in the description of a water distillation process. (Russian) **80d:35072**

Lakshmikantham, V. (*with* Vaughn, Randy) Reaction-diffusion inequalities in cones. **80j:35049**

Lehnigk, Siegfried H. Boundary condition solutions of the generalized Feller equation. **80j:35050**

Pagani, Carlo Domenico Approximation of the solutions to the first boundary value problem for parabolic equations. (Italian) **80m:35039**

Petruško, I. M. Boundary and initial values of the solutions of parabolic equations. (Russian) **80c:35044**

Pisani, Raffaele Positive solutions for the Dirichlet problem for equations of parabolic type. (Italian. English summary) **80m:35040**

Porper, F. O. (*with* Èidel'man, S. D.) Theorems on the asymptotic proximity and stability of the solutions of second-order multidimensional parabolic equations. (Russian) **80i:35093**

Reichert, Marianne *Über die Gesamtheit der Lösungen beim semilinearen l.* parabolischen Anfangsrandwertproblem. **80i:35094**

Rothe, Franz *See* Hadeler, K. P.; et al., **80i:35091**

Tarzia, Domingo Alberto Sur le problème de Stefan à deux phases. (English summary) **80c:35045**

Troianiello, Giovanni Maria *See* **Charrier, Pierre,** 80j:35048
Vaughn, Randy *See* **Lakshmikantham, V.,** 80j:35049
Vogt, H. *See* **Hadeler, K. P.; et al.,** 80i:35091

Secondary classifications:

Butuzov, V. F. (*with* Nesterov, A. V.) A singularly perturbed equation of parabolic type. (Russian) (80d:35027)
Cannon, John R. (*with* DuChateau, Paul C.) Some asymptotic boundary behavior of solutions of nonlinear parabolic initial-boundary value problems. (80g:35012)
Chabrowski, Jan Asymptotic estimates for solutions of the second boundary value problem for parabolic equations. (80e:35005)
DuChateau, Paul C. *See* **Cannon, John R.,** (80g:35012)
Dünnwel, Siegfried On some inverse problems for partial differential equations. (80i:35177)
Garay, Ricardo *See* **Lefever, René,** (80e:92010)
Idone, Giovanna The Cauchy-Dirichlet problem for a class of parabolic operators with discontinuous coefficients. (Italian) (80d:35137)
Lasiecka, Irena Boundary control of parabolic systems: regularity of optimal solutions. (80a:49034)
Lefever, René (*with* Garay, Ricardo) A mathematical model of the immune surveillance against cancer. (80e:92010)
Mangeri, Antonino The third boundary value problem for linear equations of parabolic type with discontinuous coefficients. (Italian. English summary) (80e:35061)
Nesterov, A. V. *See* **Butuzov, V. F.,** (80d:35027)
Rosen, Gerald Galerkin-Ritz procedures for approximate solutions to systems of reaction-diffusion equations. (80e:65117)
Schmidt, E. J. P. Georg (*with* Weck, Norbert) On the boundary behavior of solutions to elliptic and parabolic equations—with applications to boundary control for parabolic equations. (80d:35065)
Tao, L. N. The Stefan problem with arbitrary initial and boundary conditions. (80c:80003)
Ughi, Maura A priori estimates for the solutions of boundary value problems of fourth and fifth type for a linear parabolic equation. (Italian. English summary) (80i:35022)
Weck, Norbert *See* **Schmidt, E. J. P. Georg,** (80d:35065)

35K22 Evolution equations (any order in the spatial derivatives) [See also 58D25.]

Bolley, Catherine (*with* Crouzeix, Michel) Conservation de la positivité lors de la discrétisation des problèmes d'évolution paraboliques. 80h:35070
Crouzeix, Michel *See* **Bolley, Catherine,** 80h:35070
Fuchssteiner, Benno Application of hereditary symmetries to nonlinear evolution equations. 80j:35051
Lichnewsky, Alain (*with* Temam, Roger) Pseudosolutions of the time-dependent minimal surface problem. 80a:35059
Lumer, Gunter Approximation des solutions d'équations d'évolution pour opérateurs locaux en général et pour opérateurs elliptiques. (English summary) 80d:35073
Müller, Manfred W. (*with* Naumann, Joachim) On evolution inequalities of a modified Navier-Stokes type. III. (Russian and Czech summaries) 80f:35062
Naumann, Joachim *See* **Müller, Manfred W.,** 80f:35062
Oleinik, O. A. (*with* Radkevič, E. V.) The method of introducing a parameter for the investigation of evolution equations. (Russian) 80d:35074
Platone Garroni, Maria Giovanna (*with* Vivaldi, Maria Agostina) Régularité de la solution forte de problèmes non linéaires d'évolution. 80i:35095
Radkevič, E. V. *See* **Oleinik, O. A.,** 80d:35074
Temam, Roger *See* **Lichnewsky, Alain,** 80a:35059
Troianiello, Giovanni Maria On a class of unilateral evolution problems. 80g:35067
Uchiyama, Kôichi Caractérisation des problèmes mixtes bien posés pour des opérateurs évolutifs à coefficients constants. 80j:35052
Vivaldi, Maria Agostina *See* **Platone Garroni, Maria Giovanna,** 80i:35095

Secondary classifications:

Baras, Pierre (*with* Véron, Laurent) Comportement asymptotique de la solution d'une équation d'évolution semi-linéaire de la chaleur. (80j:35010)
Borok, V. M. (*with* Žitomirs'kiĭ, Ja. Ĭ.) Holmgren's principle in the abstract Cauchy problem for loaded equations. (Russian. English summary) (80b:34071)
Dafermos, C. M. Asymptotic behavior of solutions of evolution equations. (80i:35019)
Fan van Cyong The uniqueness of integral representations of positive definite kernels. (Russian) (80b:47031)
Miloslavskiĭ, A. I. On the Floquet theory for parabolic equations. (Russian) (80k:34086)
Showalter, R. E. Initial and final value problems for degenerate parabolic evolution systems. (80k:34081)
Véron, Laurent *See* **Baras, Pierre,** (80j:35010)
Žitomirs'kiĭ, Ja. Ĭ. *See* **Borok, V. M.,** (80b:34071)

35K25 Higher-order equations, general

Ėĭdel'man, S. D. (*with* Pletn'ova, T. G.) Harnack inequalities, integral representation, and the Fatou theorem for classical positive solutions of parabolic equations with weight $2(2q+1)$. (Russian) 80h:35071
Pletn'ova, T. G. *See* **Ėĭdel'man, S. D.,** 80h:35071
Rundell, William (*with* Stecher, Michael) The nonpositivity of solutions to pseudoparabolic equations. 80e:35031
Schuss, Zeev Backward and degenerate parabolic equations. 80a:35060
Stecher, Michael *See* **Rundell, William,** 80e:35031

Secondary classifications:

Sablé-Tougeron, Monique Problème d'évolution parabolique pour une classe d'opérateurs elliptiques et dégénérés. (English summary) (80b:35145)

35K30 Higher-order equations, initial value problems

Bilopol's'ka, Ja. Ĭ. (*with* Dalec'kiĭ, Ju. L.) Study of the Cauchy problem for quasilinear parabolic systems using Markov random processes. (Russian) 80i:35096
Dalec'kiĭ, Ju. L. *See* **Bilopol's'ka, Ja. Ĭ.,** 80i:35096
Fabes, E. B. (*with* Sroka, S.; Widman, K.-O.) Littlewood-Paley a priori estimates for parabolic equations with sub-Dini continuous coefficients. 80h:35072
Grimaldi, A. (*with* Neri, Umberto; Ragnedda, F.) On a Cauchy problem (with L^p data) for the square of the heat operator. (Italian summary) 80c:35046
Kačur, Josef Method of Rothe and nonlinear parabolic boundary value problems of arbitrary order. 80a:35061
Musialek, Jan On the Cauchy problem for the n-caloric equation and for the time-plane. 80d:35075
Myškis, P. A. The Cauchy problem for parabolic pseudodifferential equations in classes of exponentially increasing functions. (Russian) 80a:35062
Neri, Umberto *See* **Grimaldi, A.; et al.,** 80c:35046
Ragnedda, F. *See* **Grimaldi, A.; et al.,** 80c:35046
Rundell, William The uniqueness class for the Cauchy problem for pseudoparabolic equations. 80i:35097
Sroka, S. *See* **Fabes, E. B.; et al.,** 80h:35072
Widman, K.-O. *See* **Fabes, E. B.; et al.,** 80h:35072

Secondary classifications:

Friedman, Avner The flow of gas in a porous medium. (80e:76048)
Funaki, Tadahisa Probabilistic construction of the solution of some higher order parabolic differential equation. (80h:60075)

35K35 Higher-order equations, boundary value problems

Baderko, Elena Régularité minimale des frontières latérales dans les problèmes paraboliques à une variable d'espace. (English summary) 80d:35076
Belonosov, V. S. Estimates of the solutions of parabolic systems in Hölder classes with weight. (Russian) 80i:35098
Brzeziński, Jan A boundary value problem for the bicaloric equation in a half-space. 80g:35068
Ďurikovič, Vladimír Nonlinear stationary parabolic boundary value problems in an infinite cylinder. 80i:35099
Grincevičius, R. Solution of parabolic equations in domains with a nonsmooth boundary. (Russian. Lithuanian and English summaries) 80a:35063
Ivanišen, S. D. Green's matrices of general inhomogeneous boundary value problems for systems that are parabolic in the sense of I. G. Petrovskiĭ. (Russian) 80c:35047
Musialek, Jan On the bicaloric problem for the exterior of the ball. 80h:35073
Sadallah, Boubaker Khaled Une équation $2m$-parabolique dans un domaine plan singulier. (English summary) 80b:35075
Šarifbaev, Ja. S. Boundary value problems for a third-order equation with a heat operator in the principal part. (Russian) 80i:35100
Suvelka, I. V. The stabilization of the solution of a mixed problem for a nonstationary equation. (Russian) 80b:35076

Secondary classifications:

Ėĭdel'man, S. D. *See* **Žitarašu, N. V.,** (80d:35019)
Žitarašu, N. V. (*with* Ėĭdel'man, S. D.) Necessary and sufficient conditions for the stability of the solutions to model parabolic boundary value problems. (Russian) (80d:35019)

35K40 Systems, general

Amann, Herbert Invariant sets for semilinear parabolic and elliptic systems. 80h:35074
Daniljuk, G. I. Some estimates of generalized solutions of higher-order linear parabolic systems of divergence form. (Russian) 80m:35041
An estimate for the solutions of linear parabolic systems in divergence form. (Russian) 80c:35048
Milicer-Grużewska, Halina ★Sur les solutions spéciales et modifiées des opérateurs différentiels P-paraboliques. 80i:35101

Secondary classifications:

Husták, Petr (*with* Kubíček, Milan; Marek, Ivo; Marek, Miloš) Bifurcation in reaction-diffusion systems. (80i:35014)
Jahno, V. G. An inverse problem for a system of parabolic equations. (Russian) (80f:35124)
Kubíček, Milan *See* **Husták, Petr; et al.,** (80i:35014)
Kulekeev, K. D. *See* **Žumabekov, L. Ž.,** (80b:35067)
Marek, Ivo *See* **Husták, Petr; et al.,** (80i:35014)
Marek, Miloš *See* **Husták, Petr; et al.,** (80i:35014)
Žumabekov, L. Ž. (*with* Kulekeev, K. D.) Construction of the Green function of basic boundary value problems for the operator $\partial/\partial t - A\Delta$. (Russian) (80b:35067)

35K45 Systems, initial value problems

Besala, P. Fundamental solution and Cauchy problem for a parabolic system with unbounded coefficients. 80h:35075
Mimura, Masayasu (*with* Nishida, Takaaki) On a certain semilinear parabolic system related to the Lotka-Volterra ecological model. 80b:35077
Nishida, Takaaki *See* **Mimura, Masayasu,** 80b:35077

Secondary classifications:

Martin, Robert H., Jr. Asymptotic behavior for semilinear differential equations in Banach spaces. **(80a:35015)**

35K50 Systems, boundary value problems

Akramov, T. A. A mixed problem for a quasilinear parabolic system. (Russian) **80g:35069**

Amann, Herbert Existence and stability of solutions for semi-linear parabolic systems, and applications to some diffusion reaction equations. **80b:35078**

Ďurikovič, Vladimír Some properties of stationary parabolic mixed problems in an infinite cylinder. **80g:35070**

Ivasišen, S. D. Liouville theorems for the solutions of parabolic boundary value problems. (Russian. English summary) **80d:35077**

Kalašnikov, Ja. S. Poisson kernels of parabolic and elliptic boundary value problems containing lower order terms. (Russian) **80c:35049**

Martin, Robert H., Jr. A maximum principle for semilinear parabolic systems. **80b:35079**

Secondary classifications:

Mil'štein, G. N. Probabilistic solution of linear systems of elliptic and parabolic equations. (Russian. English summary) **80g:35053)**

Žitarašu, N. V. A remark on general boundary value problems for elliptic and parabolic systems of equations with discontinuous coefficients. (Russian) **(80e:35022)**

35K55 Nonlinear equations and systems

Bebernes, J. W. Solution set properties for some nonlinear parabolic differential equations. **80g:35071**

(*with* Schmitt, Klaus) On the existence of maximal and minimal solutions for parabolic partial differential equations. **80g:35072**

Bočarov, O. B. The first boundary value problem for the heat equation with indefinite coefficients. (Russian) **80e:35032**

Borisov, V. G. A system of parabolic equations containing a small parameter multiplying a derivative with respect to time. (Russian) **80d:35078**

Burch, B. C. (*with* Goldstein, Jerome A.) Nonlinear semigroups and a problem in heat conduction. **80d:35079**

Chandra, Jagdish (*with* Davis, Paul Wm.) Comparison theorems for systems of reaction-diffusion equations. **80f:35063**

Corduneanu, C. Some applications of Rothe's method to parabolic and related equations. **80f:35102**

Davis, Paul Wm. *See* **Chandra, Jagdish, 80f:35063**

Díaz, Gregorio (*with* Díaz Díaz, Jesús Ildefonso) Finite extinction time for a class of nonlinear parabolic equations. **80k:35043**

Díaz Díaz, Jesús Ildefonso *See* **Díaz, Gregorio, 80k:35043**

van Duyn, C. J. (*with* Peletier, Lambertus Adrianus) A class of similarity solutions of the nonlinear diffusion equation. **80b:35080**

Regularity properties of solutions of an equation arising in the theory of turbulence. **80b:35076**

Ebihara, Yukiyoshi (*with* Nanbu, Tokumori) A remark on the initial-value problems for some quasilinear parabolic equations. **80m:35042**

On some nonlinear evolution equations with strong dissipation. II. **80m:35043**

Field, Richard J. (*with* Troy, William C.) The existence of solitary traveling wave solutions of a model of the Belousov-Zhabotinskiĭ reaction. **80k:35044**

Fife, Paul C. The bistable nonlinear diffusion equation: basic theory and some applications. **80f:35064**

Friedman, Avner (*with* Jensen, Robert) A nonsteady flow of liquid in a porous pipe with variable permeability. **80k:35045**

Goldstein, Jerome A. *See* **Burch, B. C., 80d:35079**

Indoukov, A. V. The maximum principle for a class of quasilinear parabolic equations on the plane. (Russian) **80j:35053**

Jensen, Robert *See* **Friedman, Avner, 80k:35045**

Kalašnikov, A. S. On the concept of finite rate of propagation of perturbations. (Russian) **80j:35054**

Krylov, N. V. The maximum principle for nonlinear parabolic and elliptic equations. (Russian) **80d:35080**

Lakshmikantham, V. (*with* Vatsala, A. S.; Leela, S.) Reaction-diffusion equations in abstract cones. **80f:35065**

Leela, S. *See* **Lakshmikantham, V.; et al., 80f:35065**

Madaune, Monique Comportement des solutions d'une classe d'équations paraboliques non linéaires dégénérées du type de l'équation des milieux poreux. (English summary) **80c:35050**

Mahler, Guy Nonlinear parabolic problems in unbounded domains. **80f:35103**

Nanbu, Tokumori *See* **Ebihara, Yukiyoshi, 80m:35042**

Peletier, Lambertus Adrianus A nonlinear eigenvalue problem occurring in population genetics. **80b:35081**

See also **van Duyn, C. J., 80b:35080**

Pikula, V. P. A global solution of a nonlinear noncoercive parabolic equation. (Russian) **80j:35055**

Prjalinskiĭ, V. I. (*with* Suško, V. G.) Small-parameter asymptotics of some solutions to the Cauchy problem for a quasilinear parabolic equation. (Russian) **80k:35046**

Reder, Christine Localisation des solutions d'une équation de diffusion-réaction. (English summary) **80m:35044**

Rothe, Franz Convergence to travelling fronts in semilinear parabolic equations. **80c:35051**

Schiaffino, A. On a diffusion Volterra equation. **80h:35077**

Schmitt, Klaus *See* **Bebernes, J. W., 80g:35072**

Schoubek, Maria Elena Boundary value problems for the Fitzhugh-Nagumo equations. **80h:35078**

Suško, V. G. *See* **Prjalinskiĭ, V. I., 80k:35046**

Troy, William C. *See* **Field, Richard J., 80k:35044**

Vatsala, A. S. *See* **Lakshmikantham, V.; et al., 80f:35065**

Secondary classifications:

Aronson, D. G. A comparison method for stability analysis of nonlinear parabolic problems. **(80c:35014)**

Artola, Michel (*with* Duvaut, Georges) Homogénéisation d'une classe de problèmes non linéaires. (English summary) **(80b:76037)**

Attouch, Hédy (*with* Damlamian, Alain) Strong solutions for parabolic variational inequalities. **(80a:47093)**

Banks, H. T. (*with* Duban, Marie-Claude; Kernevez, Jean-Pierre) Optimal control of diffusion-reaction systems. **(80f:49017)**

Bardos, C. Comportement asymptotique de solutions d'équations de réaction-diffusion. (English summary) **(80e:35004)**

Brézis, Haim (*with* Crandall, Michael G.) Uniqueness of solutions of the initial-value problem for $u_t - \Delta\varphi(u) = 0$. **(80e:35029)**

Cohen, Donald S. Rotating spiral waves and oscillations in reaction-diffusion equations. **(80g:80007)**

Crandall, Michael G. *See* **Brézis, Haim, (80e:35029)**

Damlamian, Alain *See* **Attouch, Hédy, (80a:47093)**

Duban, Marie-Claude *See* **Banks, H. T.; et al., (80f:49017)**

Duvaut, Georges *See* **Artola, Michel, (80b:76037)**

Fife, Paul C. Results and open questions in the asymptotic theory of reaction-diffusion equations. **(80a:35014)**

Greenberg, J. M. (*with* Hassard, Brian; Hastings, S. P.) Pattern formation and periodic structures in systems modeled by reaction-diffusion equations. **(80c:92030)**

Hassard, Brian *See* **Greenberg, J. M.; et al., (80c:92030)**

Hastings, S. P. *See* **Greenberg, J. M.; et al., (80c:92030)**

Hess, Peter *See* **Schoenenberger-Deuel, Johanna, (80a:35010)**

Kahane, Charles S. On the asymptotic behavior of solutions of a mildly nonlinear parabolic system. **(80f:35020)**

Kernevez, Jean-Pierre *See* **Banks, H. T.; et al., (80f:49017)**

Keriner, B. Some properties of generalized solutions of quasilinear degenerate parabolic equations. (Russian) **(80d:35032)**

Klibanov, M. V. Inverse problems for a quasilinear parabolic equation. (Russian) **(80j:35093)**

Larson, D. A. Transient bounds and time-asymptotic behavior of solutions to nonlinear equations of Fisher type. **(80b:35021)**

Martin, Robert H., Jr. Asymptotic stability and critical points for nonlinear quasimonotone parabolic systems. **(80g:35011)**

Matano, Hiroshi Convergence of solutions of one-dimensional semilinear parabolic equations. **(80a:35016)**

Medeiros, Luiz Adauto J. *See* **Menzala, Gustavo Perla, (80g:35115)**

Menzala, Gustavo Perla (*with* Medeiros, Luiz Adauto J.) Regular solutions for a nonlinear evolution problem. (Spanish) **(80g:35115)**

de Mottoni, Piero (*with* Tesei, A.) Asymptotic stability results for a system of quasilinear parabolic equations. **(80f:35014)**

Reichert, Marianne Über die Gesamtheit der Lösungen beim semilinearen 1. parabolischen Anfangsrandwertproblem. **(80f:35094)**

Rubenfeld, L. A. A model bifurcation problem exhibiting the effects of slow passage through critical. **(80j:35009)**

Schoenenberger-Deuel, Johanna (*with* Hess, Peter) Nonlinear parabolic boundary value problems with upper and lower solutions. **(80a:35010)**

Talenti, Giorgio (*with* Tesei, A.) Remarks on the asymptotical behaviour of solutions to some nonlinear parabolic equations. **(80h:35015)**

Tesei, A. *See* **de Mottoni, Piero, (80f:35014)** *and* **Talenti, Giorgio, (80h:35015)**

Uchiyama, Kôhei The behavior of solutions of some nonlinear diffusion equations for large time. **(80g:35016)**

Wyskup, Michał Asymptotic properties of the solution of an equation of nonstationary filtration type. (Polish) **(80d:35018)**

35K60 Nonlinear boundary value problems for linear equations and systems; boundary value problems for nonlinear equations and systems

Alhanova, R. I. Some mixed problems for quasilinear parabolic equations. (Russian. Azerbaijani and English summaries) **80d:35081**

Amann, Herbert Existence and stability for some systems of diffusion-reaction equations. **80b:35082**

Invariant sets and existence theorems for semilinear parabolic and elliptic systems. **80b:35083**

Bebernes, J. W. (*with* Chueh, Kai Nan; Fulks, W.) Some applications of invariance for parabolic systems. **80b:35084**

Belonosov, V. S. Estimates of the solutions of parabolic systems in Hölder weight classes and some of their applications. (Russian) **80m:35045**

Borzymowski, Andrzej The uniqueness of the solution of a tangential derivative problem for a system of non-linear parabolic equations. (Italian summary) **80e:35033**

Caffarelli, Luis A. (*with* Friedman, Avner) Continuity of the temperature in the Stefan problem. **80f:35104**

Cannon, John R. (*with* Ewing, Richard E.) Quasilinear parabolic systems with nonlinear boundary conditions. **80j:35056**

Casten, Richard G. (*with* Holland, Charles J.) Instability results for reaction diffusion equations with Neumann boundary conditions. **80a:35064**

Chueh, Kai Nan *See* **Bebernes, J. W.; et al., 80b:35084**

Ebihara, Yukiyoshi On some nonlinear evolution equations with the strong dissipation. **80c:35052**

Evans, Lawrence C. (*with* Knerr, Barry F.) Instantaneous shrinking of the support of nonnegative solutions to certain nonlinear parabolic equations and variational inequalities. **80d:35082**

Ewing, Richard E. *See* **Cannon, John R., 80j:35056**
Friedman, Avner *See* **Caffarelli, Luis A., 80i:35104**
Fulks, W. *See* **Bebernes, J. W.; et al., 80b:35084**
Grundy, R. E. Similarity solutions of the nonlinear diffusion equation. **80i:35105**
Haraux, Alain Comportement à l'infini pour une équation d'ondes non linéaire dissipative. (English summary) **80b:35085**
Holland, Charles J. *See* **Canon, Richard G., 80a:35064**
Itaya, Nobutoshi A note on the blowup-nonblowup problems in nonlinear parabolic equations. **80j:35057**
Knerr, Barry F. *See* **Evans, Lawrence C., 80d:35082**
Lehnigk, Siegfried H. Conservative solutions of one-dimensional nonlinear distribution processes with drift. **80a:35065**
Matano, Hiroshi Asymptotic behavior and stability of solutions of semilinear diffusion equations. **80m:35046**
Pao, C. V. Asymptotic behavior and nonexistence of global solutions for a class of nonlinear boundary value problems of parabolic type. **80f:35066**
Asymptotic stability and nonexistence of global solution for a semilinear parabolic equation. **80m:35047**
Puel, J.-P. Variational inequalities of evolution with nonregular obstacles. **80i:35106**
Tomita, Yoshihito On a mixed problem for the multi-dimensional Hamilton-Jacobi equation in a cylindrical domain. **80c:35053**
Ventcel', T. D. Estimates of the solutions of quasilinear parabolic systems. (Russian) **80d:35083**

Secondary classifications:

Alexander, J. C. (*with* Auchmuty, J. F. G.) Global bifurcation of waves. **(80g:58021)**
Amann, Herbert Periodic solutions of semilinear parabolic equations. **(80a:35009)**
Auchmuty, J. F. G. *See* **Alexander, J. C., (80g:58021)**
Calogero, F. Spectral transform and nonlinear evolution equations. **(80g:35107)**
Fučik, Svatopluk *See* **Šťastnová, Věnceslava, (80h:35007)**
Nickel, Karl Strongly coupled systems of nonlinear parabolic differential equations. (Russian) **(80g:65121)**
Das Lemma von Max Müller - Nagumo - Westphall fü stark gekoppelte Systeme parabolischer Funktional-Differentialgleichungen. **(80b:35137)**
Pao, C. V. Asymptotic behavior and bifurcation analysis for a nonlinear diffusion system arising from gas-liquid absorption. **(80b:35013)**
Platone Garroni, Maria Giovanna (*with* Troianiello, Giovanni Maria) Some regularity results and a priori estimates for solutions of variational and quasi-variational inequalities. A survey. **(80g:35060)**
Rasulov, M. A. Investigation of the convergence of the grid method for problems of nonlinear heat conduction with absorption (Cauchy problem). (Russian. Azerbaijani and English summaries) **(80m:35037)**
Rosen, Gerald Steady-state distribution of bacteria chemotactic toward oxygen. **(80b:92011)**
Rubinstein, L. The Stefan problem: comments on its present state. **(80j:35096)**
Soltanov, K. N. The solvability of certain nonlinear problems in nonreflexive Banach spaces. (Russian. Azerbaijani and English summaries) **(80b:35042)**
Šťastnová, Věnceslava (*with* Fučík, Svatopluk) Weak periodic solutions of the boundary value problem for nonlinear heat equations. (Czech and Russian summaries) **(80h:35007)**
Troianiello, Giovanni Maria *See* **Platone Garroni, Maria Giovanna, (80g:35060)**

35K65 Equations and systems of degenerate type

Acker, Andrew (*with* Walter, Wolfgang) On the global existence of solutions of parabolic differential equations with a singular nonlinear term. **80c:35054**
Díaz Díaz, Jesús Ildefonso Solutions with compact support for some degenerate parabolic problems. **80i:35107**
Kadyrov, A. Periodic solutions of a system of nonlinear equations of parabolic type that are degenerate on the boundary of the domain. (Russian) **80g:35073**
Kerlner, R. The behavior of the solutions of degenerate quasilinear parabolic equations as $t \to \infty$. (Russian) **80m:35048**
Nauba, Tokumori The Cauchy problem for quasilinear degenerate parabolic equations. **80m:35049**
Pukal'skiĭ, I. D. Boundary value problems for some degenerate equations of parabolic type. (Russian) **80i:35108**
Tyčinskaja, L. M. Interior properties of the solutions of some degenerate parabolic equations. (Russian) **80k:35047**
Walter, Wolfgang *See* **Acker, Andrew, 80c:35054**

Secondary classifications:

Langlais, Michel Solutions fortes pour une classe de problèmes aux limites du second ordre dégénérés. **(80j:35071)**
Showalter, R. E. Degenerate parabolic initial-boundary value problems. **(80h:35033)**
von Wahl, Wolf Über die stationären Gleichungen von Navier-Stokes, semilineare elliptische und parabolische Gleichungen. **(80h:35061)**

35K70 Ultraparabolic, pseudoparabolic problems

Colton, David (*with* Wimp, Jet) Asymptotic behaviour of the fundamental solution to the equation of heat conduction in two temperatures. **80h:35079**
Rundell, William The Stefan problem for a pseudo-heat equation. **80b:35086**
Wimp, Jet *See* **Colton, David, 80h:35079**

Secondary classifications:

Matahashi, Tomomi *See* **Tsutsumi, Masayoshi, (80h:34083)**
Tsutsumi, Masayoshi (*with* Matahashi, Tomomi) On some nonlinear pseudoparabolic equations. **(80h:34083)**

35K99 None of the above, but in this section

Chabrowski, Jan (*with* Johnson, Raymond) An axiomatic approach to the problem of representation of solutions of parabolic equations and systems. (Russian summary) **80d:35084**
Damlamian, Alain Homogénéisation du problème de Stéfan. (English summary) **80f:35067**
Eklund, Neil Erratum to: "Generalized super-solutions of parabolic equations" (Trans. Amer. Math. Soc. **220** (1976), 235–242). **80b:35087**
Gabutti, Bruno (*with* Negro, Angelo) Some results on asymptotic behaviour of the Volterra-Lotka diffusion equations. (Italian summary) **80d:35085**
Johnson, Raymond *See* **Chabrowski, Jan, 80d:35084**
Muhidinov, N. M. Some analytic solutions of linear and quasilinear filtration equations. (Russian) **80b:35088**
Negro, Angelo *See* **Gabutti, Bruno, 80d:35085**
Rundell, William (*with* Stecher, Michael) A Runge approximation and unique continuation theorem for pseudoparabolic equations. **80c:35055**
Stecher, Michael *See* **Rundell, William, 80c:35055**
Takagi, Izumi Stability of bifurcating solutions of the Gierer-Meinhardt systems. **80f:35068**

Secondary classifications:

Amba-Rao, C. L. *See* **Hussaini, M. Y., (80d:73079)**
Aronson, D. G. (*with* Weinberger, H. F.) Multidimensional nonlinear diffusion arising in population genetics. **(80a:35013)**
Arthur, M. D. (*with* Voigt, Jürgen; Zweifel, P. F.) An existence and uniqueness theorem for the Vlasov-Maxwell equations. **(80h:82027)**
Auchmuty, J. F. G. Qualitative effects of diffusion in chemical systems. **(80b:92050)**
Bess, Leon A diffusion model for the Dirac equation. **(80b:81035)**
Brauner, Claude-Michel (*with* Nicolaenko, Basil) Sur des problèmes aux valeurs propres non linéaires qui se prolongent en problèmes à frontière libre. (English summary) **(80b:35048)**
Butzer, P. L. (*with* Dickmeis, W.; Nessel, R. J.) Lax-type theorems with orders in connection with inhomogeneous evolution equations in Banach spaces. **(80a:65103)**
Cazenave, Thierry (*with* Haraux, Alain) Équation de Schrödinger avec non-linéarité logarithmique. (English summary) **(80b:35045)**
Chueh, Kai Nan A compact positively invariant set of solutions of the Nagumo equation. **(80d:35134)**
Dickmeis, W. *See* **Butzer, P. L.; et al., (80a:65103)**
Ducourtioux, Jean-Louis Temps de vie des solutions de l'équation de la chaleur de Eells-Sampson. (English summary) **(80f:58048)**
Fitzgibbon, W. E. Delay equations of parabolic type in Banach space. **(80j:34102)**
Frehse, Jens (*with* Mosco, Umberto) Sur la régularité des solutions faibles de certaines inéquations variationnelles et quasi variationnelles non linéaires du contrôle stochastique. (English summary) **(80c:49022)**
Haraux, Alain *See* **Cazenave, Thierry, (80b:35045)**
Henry, Jacques Controllability of some nonlinear parabolic equations. **(80a:93028)**
Hochberg, Kenneth J. A signed measure on path space related to Wiener measure. **(80i:60111)**
Hounie, Jorge G. Global hypoellipticity of periodic first-order evolution operators. **(80f:35033)**
Husid, B. M. *See* **Voroĭnin, L. G., (80f:82058)**
Hussaini, M. Y. (*with* Amba-Rao, C. L.) The general solution to the classical problem of the finite Euler-Bernoulli beam. (German summary) **(80d:73079)**
Kolesov, Ju. S. Stability of solutions of linear differential equations of parabolic type with almost periodic coefficients. (Russian) **(80g:34059)**
Kolosov, V. V. (*with* Šifrin, È. G.) Flow around a body with a formation of a fully developed stationary discontinuous region as $\mathrm{Re} \to \infty$. (Russian) **(80a:76028)**
Kürcz, Anton Zur Lösung parabolischer Gleichungen und Systeme mittels Integraloperatoren. **(80a:35021)**
Langmach, Hartmut On the determination of functional parameters in some parabolic differential equation. **(80g:35125)**
Matahashi, Tomomi (*with* Tsutsumi, Masayoshi) On a periodic problem for pseudo-parabolic equations of Sobolev-Galpern type. **(80a:34086)**
(*with* Tsutsumi, Masayoshi) Periodic solutions of semilinear pseudoparabolic equations in Hilbert space. **(80j:34085)**
Mimura, Masayasu (*with* Murray, James Dickson) On a diffusive prey-predator model which exhibits patchiness. **(80c:92036)**
Mosco, Umberto *See* **Frehse, Jens, (80c:49022)**
Murray, James Dickson *See* **Mimura, Masayasu, (80c:92036)**
Nazarova, T. M. A variational inequality for a class of hyperbolic-parabolic equations. (Russian) **(80d:35108)**
Nessel, R. J. *See* **Butzer, P. L.; et al., (80a:65103)**
Nicolaenko, Basil *See* **Brauner, Claude-Michel, (80b:35048)**
Políčka, A. E. (*with* Sobolevskiĭ, P. E.) Correct solvability of parabolic difference equations in Bochner spaces. (Russian) **(80g:34063)**
Rios, Hélène Étude de certains problèmes paraboliques: existence et approximation des solutions. **(80i:49031)**
Šarifbaev, Ja. S. A problem for a third-order equation with a heat operator in the principal part. (Russian) **(80d:35110)**
Seidman, Thomas I. Parameter and state estimation for a diffusion process. **(80i:93056)**
Šifrin, È. G. *See* **Kolosov, V. V., (80a:76028)**
Sobolevskiĭ, P. E. *See* **Políčka, A. E., (80g:34063)**
Soppa, M. S. Boundary value problems for equations of a multicomponent boundary layer with a general diffusion matrix. (Russian) **(80c:76036)**
The existence of a multicomponent thermal boundary layer in the case of a general matrix of diffusion. (Russian) **(80i:80007)**
Tsutsumi, Masayoshi *See* **Matahashi, Tomomi, (80a:34086)** *and* **Matahashi, Tomomi, (80j:34085)**
Voigt, Jürgen *See* **Arthur, M. D.; et al., (80h:82027)**

Vovoinin, L. G. (*with* Husid, B. M.) ★Диффузионный массоперенос в многокомпонентных системах. (Russian) [Diffusion mass transport in multicomponent systems] **(80f:82058)**
Weinberger, H. F. *See* **Aronson, D. G., (80a:35013)**
van der Werff, Terry J. (*with* Wilhelm, Horst E.) Steady state bifurcation analysis of reaction-diffusion equations—a critique. **(80b:92052)**
Wilhelm, Horst E. *See* **van der Werff, Terry J., (80b:92052)**
Zweifel, P. F. *See* **Arthur, M. D.; et al., (80h:82027)**

35Lxx Hyperbolic equations and systems [See also 58G16.]

35L05 Wave equation

Buzzetti, Francesco Wave propagation in an unbounded M-dimensional medium when the resistance is a discontinuous function of the velocity. III. (Italian) **80j:35058**
Chen, Y. W. Solution of the wave equation in $\mathbf{R}^{n+1}$ with data on a characteristic cone. **80a:35066**
Fink, James P. The Pettis integration of a perturbed wave equation. **80d:35086**
Gabov, S. A. On the Whitham equation. (Russian) **80g:35074**
Gårding, Lars Rectification à la note: "Le problème de la dérivée oblique pour l'équation des ondes" (C. R. Acad. Sci. Paris Sér. A-B **285** (1977), no. 12, A773–A775). **80a:35067**
Gordienko, Valeri M. Un problème mixte pour l'équation vectorielle des ondes: cas de dissipation de l'énergie; cas mal posés. (English summary) **80b:35089**
Halmovici, Adolf On Lorentz invariant solutions of two-variables quasi-linear wave equation. **80c:35056**
Ivrii, V. Ja. Nonclassical propagation of singularities for the solution of a wave equation near the boundary. (Russian) **80j:35059**
Propagation of singularities of solutions of nonclassical boundary value problems for the wave equation. (Russian) **80j:35060**
Lagnese, John On the support of solutions of the wave equation with applications to exact boundary value controllability. **80h:35080**
Lundberg, Lars-Erik The Klein-Gordon equation with light-cone data. **80m:35050**
Perlan, A. V. The behavior of the solution of the Cauchy problem for a hyperbolic equation as $t \to \infty$. (Russian) **80a:35068**
Ralston, James V. Note on the decay of acoustic waves. **80m:35051**
Soga, Hideo Mixed problems for the wave equation in a quarter space with a first order boundary condition. **80c:35057**
Strauss, Walter Alexander Nonlinear invariant wave equations. **80b:35090**
Tanura, Hideo Local energy decays for wave equations with time-dependent coefficients. **80c:35058**
On the decay of the local energy for wave equations with a moving obstacle. **80c:35059**
Taniguchi, Masaru Mixed problem for wave equation in the domain with a corner. **80i:35109**
Toyoda, Toshiyuki Theorem on plane wave solutions. **80i:35110**
Varenne, Jean-Pierre Diffraction par un angle ou un dièdre. (English summary) **80m:35052**

Secondary classifications:

d'Acunto, Berardino A nonlinear case of elastic vibrations of a string. (Italian) **(80g:73027)**
Alimov, A. L. *See* **Berkinov, H. B., (80b:35032)**
Asakura, Fumioki On the Green's function for $\Delta - \lambda^2$ with the boundary condition of the third kind in the exterior domain of a bounded obstacle. **(80c:35022)**
Bécus, Georges A. Wave propagation in imperfectly periodic structures: a random evolution approach. (French summary) **(80e:73022)**
Berkinov, H. B. (*with* Alimov, A. L.) Solution of the Cauchy problem for equations that contain products of wave operators by the method of initial functions. (Russian) **(80b:35032)**
Guillot, Jean-Claude (*with* Ralston, James V.) Construction d'ondes de Rayleigh asymptotiques. (English summary) **(80b:35031)**
Ibes, H.-K. Existenz und Eindeutigkeit eines linearen hyperbolischen Anfangs-Randwertproblems und die praktische Anwendung auf Probleme aus der Hydraulik. II. Die lineare hyperbolische Anfangs-Randwertaufgabe auf Probleme aus der Hydraulik angewandt. (English and Russian summaries) **(80m:76019)**
Mascini, Giovanni Periodic solutions of some semilinear autonomous wave equations. (Italian summary) **(80g:35009)**
Megrabov, A. G. On the determination of a set of point sources. (Russian) **(80c:78017)**
Muravei, L. A. Asymptotic behavior, for large time values, of the solutions of exterior boundary value problems for a wave equation with two space variables. (Russian) **(80i:35021)**
Ralston, James V. *See* **Guillot, Jean-Claude, (80b:35031)**
Suleimanov, A. S. A class of exact solutions of the wave equation in cylindrical coordinates. (Russian) **(80h:35019)**
Symes, William W. An inverse hyperbolic boundary value problem. **(80c:35101)**
Yamaguchi, Masaru Almost periodic solutions of undamped linear wave equations. **(80i:35009)**

35L10 Second-order equations, general

Colombini, Ferruccio (*with* Spagnolo, Sergio) On the convergence of solutions of hyperbolic equations. **80a:35069**
Cymbal, T. B. Extremum principles for some systems of equations of hyperbolic type. (Russian) **80c:35060**
Hadzverdiev, K. I. Investigation of generalized and almost everywhere solutions of a multidimensional mixed problem for a class of second order semilinear hyperbolic equations. (Russian. Azerbaijani and English summaries) **80h:35081**
Lanckau, Eberhard Die Riemannfunktion selbstadjungierter Gleichungen. **80k:35048**
Spagnolo, Sergio *See* **Colombini, Ferruccio, 80a:35069**

Secondary classifications:

Aleskerov, A. G. (*with* Aliev, Rašid Musa) Generalized solution of a mixed problem for a hyperbolic equation of neutral type. (Russian. Azerbaijani and English summaries) **(80b:35136)**
Alicu, Mira-Cristiana The Darboux problem for partial differential functional equations of hyperbolic type. **(80c:35095)**
Aliev, Rašid Musa *See* **Aleskerov, A. G., (80b:35136)**
Fajazov, K. S. The construction of the Carleman function in the nonhyperbolic Cauchy problem for the wave equation. (Russian) **(80g:35032)**
Halmovici, Adolf On invariant solutions of some hyperbolic partial differential equations. **(80d:35022)**
Kabanihin, S. I. Application of energy inequalities to an inverse problem for a hyperbolic equation. (Russian) **(80f:35125)**
Ljaško, S. I. A method of finding the approximate solution to the Cauchy problem with an operator coefficient of hyperbolic type. (Russian) **(80k:34080)**
Pagan, Gordon (*with* Stocks, David) Oscillation criteria for second order hyperbolic initial value problems. **(80k:35008)**
Pikulin, V. P. The global solution of weakly nonlinear hyperbolic equations in a Hilbert space. (Russian) **(80f:34059)**
Spagnolo, Sergio Convergence de solutions d'équations d'évolution. **(80k:35001)**
Stocks, David *See* **Pagan, Gordon, (80k:35008)**
Zubarev, S. V. Control of a domain in certain systems with distributed parameters. (Russian. English summary) **(80f:49003)**

35L15 Second-order equations, initial value problems

Baranovskiĭ, F. T. A mixed problem for a second order degenerate hyperbolic equation with two variables. (Russian) **80a:35070**
(Belocerkovskiĭ, D. M.) *See* **Hadamard, Jacques, 80b:35091**
Cahlon, Baruch On the initial value problem for a certain partial differential equation. **80e:35034**
Ebihara, Yukiyoshi On the classical solution of the initial value problem for a nonlinear wave equation. **80i:35111**
Grebeničikov, V. I. Solution of the Cauchy problem for a three-dimensional equation of hyperbolic type. (Russian) **80a:35071**
Hadamard, Jacques ★Задача Коши для линейных уравнений с частными производными гиперболического типа. (Russian) [The Cauchy problem for linear partial differential equations of hyperbolic type] **80b:35091**
Šilatskiĭ, S. P. Uniqueness and stability of some Cauchy problems for second-order equations. (Russian) **80i:35112**
(Šugaev, F. V.) *See* **Hadamard, Jacques, 80b:35091**
Yoshida, Kiyoshi Sur le problème de Cauchy pour des équations faiblement hyperboliques. **80a:35072**

Secondary classifications:

Alinhac, S. L. Branching of singularities for a class of hyperbolic operators. **(80f:35012)**
Šenk, D. Solution of the Cauchy problem and asymptotic behavior of the spectral function of the Schrödinger operator in the case of a singular potential. (Russian) **(80i:35143)**
Šilatskiĭ, S. P. Unicité et stabilité de problèmes de Cauchy pour des équations du second ordre. **(80c:35002)**

35L20 Second-order equations, boundary value problems

Abdul-Latif, Ali I. Dirichlet, Neumann and mixed Dirichlet-Neumann boundary value problems for $U_{xy} = 0$ in rectangles. **80i:35113**
Airapetjan, R. G. Equivalent forms for the Lopatinskiĭ condition for second-order hyperbolic equations. (Russian. Armenian summary) **80d:35087**
Allouche, Jean-Paul ★Vibrations de classe $C^{s/2}$ des tores plats T^s et théorie des nombres. **80b:35092**
Baranovskiĭ, F. T. A mixed problem for a strongly degenerate hyperbolic equation with modified initial data. (Russian) **80a:35073**
Fedorov, Ju. I. Solution of the Δ_2 problem for an equation of hyperbolic type. (Russian) **80b:35093**
Hirvonen, Kullervo Bemerkungen über Lösungseigenschaften der Randwertprobleme für die Wellengleichung. **80e:35035**
Inoue, Atsushi On a mixed problem for $\Box$ with a discontinuous boundary condition. II. An example of moving boundary. **80a:35074**
John, Fritz Blow-up of solutions of nonlinear wave equations in three space dimensions. **80i:35114**
Kiričenko, V. F. *See* **Kulikov, È. I., 80b:35094**
Kulikov, È. I. (*with* Kiričenko, V. F.) On the estimation of the classical solution of a mixed problem for a hyperbolic equation. (Russian) **80b:35094**
Kumykova, S. K. A boundary value problem for a degenerate hyperbolic equation in a characteristic crescent. (Russian) **80c:35061**
Lavrent'ev, M. M. (*with* Temirbulatov, S. I.) On the theory of the mixed problem for the wave equation. (Russian) **80h:35082**
Melrose, Richard (*with* Sjöstrand, Johannes) Propagation de singularités pour des problèmes aux limites d'ordre 2. **80d:35088**
Milla Miranda, Manuel Homogénéisation d'un problème hyperbolique périodique avec conditions aux limites mixtes. (English summary) **80d:35089**
Muradov, R. I. The mixed problem for a singular hyperbolic equation with a small parameter. (Russian) **80j:35061**
Povoas, M. On a second order degenerate hyperbolic equation. (Italian summary) **80i:35115**
Salmanova, D. G. A mixed problem for a second-order hyperbolic equation in an unbounded domain. (Russian) **80e:35036**
Sjöstrand, Johannes *See* **Melrose, Richard, 80d:35088**

Temirbolatov, S. I. Conditionally well-posed problems for the wave equation. (Russian) **80h:35083**

See also **Lavrent'ev, M. M., 80h:35082**

Secondary classifications:

Kabanikhin, S. I. The uniqueness of the determination of the coefficients of a hyperbolic equation. (Russian) **80f:35126**

Lobanov, E. V. (*with* Rybak, S. A.) Nonconservative boundary-value problems of wave theory. **80h:76034**

Romanov, V. G. Inverse problems for hyperbolic equations and energy inequalities. (Russian) **80h:35144**

Rybak, S. A. *See* **Lobanov, E. V., 80h:76034**

Wan, Jo Hsin On the exact controllability for hyperbolic systems. **80j:93019**

35L25 Higher-order equations, general

Gromova, L. G. A necessary and sufficient condition for the preservation of weak lacunae for an equation with lower order terms in the case of two independent variables. (Russian. English summary) **80a:35075**

Lascar, Richard Paramétrices microlocales de problèmes aux limites pour des équations pseudo-différentielles à caractéristiques de multiplicité variable. (English summary) **80h:35095**

Une relation entre la propagation des singularités et la propagation du support pour des opérateurs hyperboliques. (English summary) **80e:35037**

Münster, Michel On hyperbolic polynomials with constant coefficients. **80e:35062**

Salyga, B. O. Analogue of a multipoint problem for a nonstrictly hyperbolic operator with coefficients that are variable with respect to t. (Russian) **80e:35063**

Wakabayashi, Seiichiro Microlocal parametrices for hyperbolic mixed problems in the case where boundary waves appear. **80f:35069**

Secondary classifications:

Nishiwada, Kinimasa On weak evolution operators with constant coefficients and spreading of wave packets. **80e:35012**

35L30 Higher-order equations, initial value problems

Germanjuk, I. M. The existence and continuous dependence on a parameter of the solution of the Cauchy problem for an mth order hyperbolic equation. (Russian) **80a:35076**

Jagdžjan, K. A. The Cauchy problem for a weakly hyperbolic equation in Gevrey classes. (Russian. Armenian and English summaries) **80a:35077**

Kajitani, Kunihiko On the S-well-posed evolution equations. **80f:35070**

Lascar, Richard Paramétrices microlocales pour un problème de Cauchy à multiplicité variable. (English summary) **80h:35096**

Makowiecka, Irena Investigations into the boundedness of the solutions for the equation of the longitudinal vibrations of the bar. **80e:35038**

Nishitani, Tatsuo On the Cauchy problem for weakly hyperbolic equations. **80a:35078**

Zeman, Marvin The Levi-Lax condition for partial differential equations with real characteristics of constant multiplicity. **80h:35097**

Secondary classifications:

Sjöstrand, Johannes Sur la propagation des singularités analytiques pour certains problèmes de Dirichlet. (English summary) **80e:58026**

35L35 Higher-order equations, boundary value problems

Isakov, V. M. Strictly hyperbolic diffraction problems. (Russian) **80a:35079**

Nahušev, A. M. Nonlocal and Goursat problems for a loaded equation of hyperbolic type and their application to the prediction of soil moisture. (Russian) **80h:35084**

Secondary classifications:

Boutet de Monvel, Louis Lacunas and transmissions. **80k:58092**

Carr, J. (*with* Malhardeen, M. Z. M.) Beck's problem. **80h:35013**

Malhardeen, M. Z. M. *See* **Carr, J., 80h:35013**

Moiseenkov, V. B. Quasiperiodic solutions of nonlinear hyperbolic equations with damping. (Russian) **80f:35008**

Šafiev, N. K. Asymptotic behavior with respect to the small parameter of the solution to a mixed problem for a hyperbolic equation that degenerates into a parabolic one. (Russian) **80e:35013**

35L40 First-order systems, general

Florescu, Doru Dan On the existence of solutions of some hyperbolic systems of special type. (Romanian. English summary) **80a:35080**

Giambò, Sebastiano (*with* Greco, Antonio; Pantano, Pietro) Sur la méthode perturbative et réductive à n-dimensions: le fluide classique. (English summary) **80e:35064**

Greco, Antonio *See* **Giambò, Sebastiano; et al., 80e:35064**

Liu, Tai Ping Development of singularities in the nonlinear waves for quasilinear hyperbolic partial differential equations. **80g:35075**

Markovs'kiĭ, A. L. Regularizers of certain mixed problems on the plane. (Russian) **80h:35049**

Morimoto, Yoshinori Fundamental solution for a hyperbolic equation with involutive characteristics of variable multiplicity. **80f:35116**

Pantano, Pietro *See* **Giambò, Sebastiano; et al., 80e:35064**

Šackiĭ, V. P. Hyperbolic systems with two planes of singularities. (Russian) **80j:35062**

Žilin, A. E. The method of differential constraints for strictly hyperbolic systems with several independent variables. (Russian) **80g:35076**

Secondary classifications:

Ávila, Geraldo S. S. (*with* Costa, David Goldstein) Asymptotic properties of general symmetric hyperbolic systems. **80d:35016**

(*with* Costa, David Goldstein) Decay of solutions of symmetric hyperbolic systems of partial differential equations. **80d:35015**

Ch'uck, Wan Jo Hsin A feedback control for a linear hyperbolic system. **80c:93056**

Costa, David Goldstein Uniform asymptotic decay for a class of hyperbolic systems. **80d:35014**

See also **Ávila, Geraldo S. S., 80d:35015** *and* **Ávila, Geraldo S. S., 80d:35016**

Hedstrom, G. W. Nonreflecting boundary conditions for nonlinear hyperbolic systems. **80i:76034**

Homa, G. P. Averaging in hyperbolic systems of standard form with deviating argument. (Russian) **80h:35122**

Romanov, V. G. Problèmes inverses pour les systèmes hyperboliques. **80c:35099**

Inverse problems for hyperbolic systems. (Russian) **80f:35180**

A formulation of an inverse problem for first-order symmetric hyperbolic systems. (Russian) **80c:35100**

The uniqueness of the solution of an inverse problem for first-order hyperbolic systems. (Russian) **80f:35181**

Wilcox, Calvin H. Asymptotic wave functions and energy distributions in strongly propagative anisotropic media. **80j:35082**

35L45 First-order systems, initial value problems

Debeneix, Thierry Condition d'entropie pour certains systèmes hyperboliques quasilinéaires de n équations à n variables d'espace. (English summary) **80b:35098**

Gilliam, David S. (*with* Schulenberger, John R.) A class of symmetric hyperbolic systems with special properties. **80f:35071**

Ksul, C. N. One-dimensional, nonlinear wave motion. (French and German summaries) **80f:35072**

Kumano-go, Hitoshi Fundamental solution for a hyperbolic system with diagonal principal part. **80j:35063**

Lai, Hang Ch'ing Unique continuation for symmetric hyperbolic systems of first order with discontinuous coefficients. **80c:35065**

Schulenberger, John R. *See* **Gilliam, David S., 80f:35071**

Tarama, Sigeo Le problème de Cauchy pour une classe des systèmes faiblement hyperboliques. **80h:35085**

Trépreau, J. M. Problème de Cauchy hyperbolique non strict dans des classes d'ultradistributions. **80e:35039**

Le problème de Cauchy hyperbolique dans les classes d'ultrafonctions et d'ultradistributions. **80e:35040**

Secondary classifications:

Homa, G. P. *See* **Mitropol'skiĭ, Ju. O., 80g:35014**

Mitropol'skiĭ, Ju. O. (*with* Homa, G. P.) Averaging methods for hyperbolic systems with fast and slow variables. The Cauchy problem. (Russian) **80g:35014**

35L50 First-order systems, boundary value problems

Barbu, Viorel (*with* Vrabie, Ioan I.) An existence result for a nonlinear boundary-value problem of hyperbolic type. **80g:35077**

Li, Da Qian Une remarque sur un problème à frontière libre. (English summary) **80f:35117**

Pucci, Patrizia Boundary value problems for systems of hyperbolic equations. (Italian. English summary) **80h:35086**

Vrabie, Ioan I. *See* **Barbu, Viorel, 80g:35077**

Secondary classifications:

Kubota, Kôji (*with* Ohkubo, Toshio) On well-posedness of mixed problems for Maxwell's equations. II. **80h:35116**

Ohkubo, Toshio *See* **Kubota, Kôji, 80h:35116**

Umbetžanov, D. U. Almost multiperiodic solution of a hyperbolic system of differential equations. (Russian. Kazakh summary) **80c:35009**

35L55 Higher-order hyperbolic systems

d'Acunto, Berardino *See* **Citrini, Claudio, 80f:35074**

Berzin, Robert (*with* Vaillant, Jean) Paramétrix du problème de Cauchy pour un système faiblement hyperbolique à caractéristiques multiples. (English summary) **80a:35081**

(*with* Vaillant, Jean) Systèmes hyperboliques à caractéristiques multiples. **80f:35073**

Brenner, Philip On the existence of global smooth solutions of certain semilinear hyperbolic equations. **80g:35078**

Citrini, Claudio (*with* d'Acunto, Berardino) Sur le choc de deux cordes. (English summary) **80f:35074**

Gourdin, Daniel Problème de Cauchy non caractéristique pour les systèmes hyperboliques à caractéristiques de multiplicité variable. Domaine de dépendance. **80h:35087**

Haribegašvili, S. S. Characteristic problem for second-order strictly hyperbolic systems with two independent variables. (Russian) **80g:35079**

John, Fritz Algebraic conditions for hyperbolicity of systems of partial differential equations. **80h:35099a**

Addendum to: "Algebraic conditions for hyperbolicity of systems of partial differential equations" (Comm. Pure Appl. Math. 31 (1978), no. 1, 89–106). **80h:35099b**

Nikonova, G. A. The Cauchy problem for certain linear multidimensional systems over Gevrey-Leray-Ohya spaces. (Russian) **80d:35090**

Nouschegueme, Norbert Application de la théorie de Leray au problème de Cauchy sur deux hypersurfaces caractéristiques sécantes. (English summary) **80b:35088**

Orazov, Dž. An analoque of the Darboux problem for a hyperbolic system in three-dimensional space. (Russian) **80e:35041**

Poličuk, V. N. (*with* Ptašnik, B. Ĭ.) The periodic boundary value problem for a system of hyperbolic equations with constant coefficients. (Russian) **80b:35100**

A problem with nonlocal boundary conditions for hyperbolic systems of differential equations with constant coefficients. (Russian. English summary) **80f:35075**

Ptašnik, B. Ĭ. *See* **Poličuk, V. N., 80b:35100** *and* **Žuk, V. I., 80f:35076**

Vaillant, Jean *See* **Berzin, Robert, 80a:35081** *and* **Berzin, Robert, 80f:35073**

Žuk, V. I. (*with* Ptašnik, B. Ĭ.) A boundary value problem for a system of hyperbolic equations with constant coefficients. (Russian) **80f:35076**

Secondary classifications:

Kadob'jans'kiĭ, R. M. *See* **Kozak, P. P., (80k:35013)**

Kozak, P. P. (*with* Kadob'jans'kiĭ, R. M.) Representation of the solution of a characteristic problem for a system of higher-order linear differential equations in the form of an integral with respect to Wiener measure. (Russian. English summary) **(80k:35013)**

Kuliev, G. F. The existence of optimal controls for processes that are described by hyperbolic equations. (Russian. Azerbaijani and English summaries) **(80b:49003)**

Nouaas, Jean-Clarence Paramétrix du problème de Cauchy pour une classe de systèmes hyperboliques symétrisables à caractéristiques involutives de multiplicité variable. (English summary) **(80b:35043)**

Prepelitǎ, Valeriu Stability of a class of dynamical hyperbolic systems. **(80i:35017)**

35L60 First-order nonlinear equations and systems

Bassanini, Piero An application of Lax's estimates to the determination of critical crystal thickness in nonlinear laser optics. **80m:35053**

Fukuda, Isamu (*with* Tsutsumi, Masayoshi) On coupled Klein-Gordon-Schrödinger equations. III. Higher order interaction, decay and blow-up. **80j:35064**

Furikov, A. V. First integrals and the integrability of systems of quasilinear equations. (Russian) **80a:35082**

Hall, William S. The Rayleigh and van der Pol wave equations, some generalizations. **80i:35118**

Homa, G. P. *See* **Mitropol's'kiĭ, Ju. O., 80j:35065**

Lascar, Bernard Singularités des solutions d'équations aux dérivées partielles non linéaires. (English summary) **80b:35101**

Mitropol's'kiĭ, Ju. O. (*with* Homa, G. P.) Averaging methods for hyperbolic systems with fast and slow variables. A mixed problem. (Russian) **80j:35065**

Tartar, L. Équations hyperboliques non linéaires. **80a:35083**

Tsutsumi, Masayoshi *See* **Fukuda, Isamu, 80j:35064**

Secondary classifications:

Lin, Jeng Eng Superexponential decay of solutions of a semilinear wave equation. **(80g:35013)**

Medeiros, Luiz Adauto J. On a new class of nonlinear wave equations. **(80f:34057)**

35L65 Conservation laws [See also 76–XX.]

Boillat, Guy (*with* Ruggeri, Tommaso) Reflection and transmission of discontinuity waves through a shock wave. General theory including also the case of characteristic shocks. **80f:35078**

(*with* Ruggeri, Tommaso) On the evolution law of weak discontinuities for hyperbolic quasilinear systems. **80f:35077**

Diperna, Ronald J. Entropy and the uniqueness of solutions to hyperbolic conservation laws. **80c:35066**

Hyperbolic conservation laws. **80f:35079**

Uniqueness of solutions to hyperbolic conservation laws. **80i:35119**

Doktor, A. Existence in the large of a solution for a boundary value problem for quasilinear systems of the type of conservation laws. (Russian) **80i:35120**

Donato, Andrea Influence of a strong discontinuity on the propagation of second order discontinuities. **80j:35066**

Jeffrey, Alan Nonlinear wave propagation. **80a:35084**

Jennings, Gray Piecewise smooth solutions of a single conservation law exist. **80j:35067**

Keyfitz, Barbara L. (*with* Kranzer, Herbert C.) A system of nonstrictly hyperbolic conservation laws arising in elasticity theory. **80k:35050**

Kranzer, Herbert C. *See* **Keyfitz, Barbara L., 80k:35050**

Lin, Long Wei A study of the global solutions for the class K of quasilinear hyperbolic systems of conservation laws. (Chinese. English summary) **80b:35102**

Liu, Tai Ping Asymptotic behavior of solutions of general system of nonlinear hyperbolic conservation laws. **80b:35103**

The free piston problem for gas dynamics. **80d:35091**

Ruggeri, Tommaso *See* **Boillat, Guy, 80f:35077** *and* **Boillat, Guy, 80f:35078**

Schaeffer, David G. An application of the Nash-Moser theorem to a free boundary problem. **80c:35067**

Secondary classifications:

Carlisch, Russel E. Navier-Stokes and Boltzmann shock profiles for a model of gas dynamics. **(80g:76040)**

Calogero, F. (*with* Degasperis, A.) Conservation laws for classes of nonlinear evolution equations solvable by the spectral transform. **(80b:35123)**

Dafermos, C. M. Hyperbolic balance laws in continuum physics. **(80j:73003)**

The second law of thermodynamics and stability. **(80j:73004)**

Degasperis, A. *See* **Calogero, F., (80b:35123)**

Friedrichs, K. O. On the mathematical theory of deflagrations and detonations. **(80c:76038)**

Ikeda, Tsutomu (*with* Nakagawa, Tomoyasu) On the SHASTA FCT algorithm for the equation $\partial\rho/\partial t+(\partial/\partial x)(v(\rho)\,\rho)=0$. **(80i:65097)**

Kaleva, S. I. Differential conservation laws for a class of gravitational theories with a generalized Lagrangian. (Russian. English summary) **(80d:83061)**

Lax, Peter D. Recent methods for computing discontinuous solutions—a review. **(80j:65039)**

Mock, M. S. Some higher order difference schemes enforcing an entropy inequality. **(80a:65198)**

Nakagawa, Tomoyasu *See* **Ikeda, Tsutomu, (80i:65097)**

Nakata, Isamu The limit shock waves in a plasma. **(80f:76047)**

Silbner, L. M. (*with* Sibner, R. J.) Nonlinear Hodge theory: applications. **(80k:58058)**

Silbner, R. J. *See* **Silbner, L. M., (80k:58058)**

Slemrod, M. Damped conservation laws in continuum mechanics. **(80g:73008)**

Tunjak, V. N. Conservation laws in the tetrad formulation of general relativity. (Russian) **(80e:83013)**

35L67 Shocks and singularities

Conlon, Joseph G. A theorem in ordinary differential equations with an application to hyperbolic conservation laws. **80m:35054**

Li, Bang He Global structure of shock waves. **80i:35121**

Reed, Michael C. Propagation of singularities. **80b:35104**

Propagation of singularities for non-linear wave equations in one dimension. **80d:35092**

Sadkov, Ju. N. Systems of quasilinear first-order hyperbolic equations with linear rarefaction waves. (Russian) **80h:35089**

Taylor, Michael E. Propagation, reflection, and diffraction of singularities of solutions to wave equations. **80j:35068**

Secondary classifications:

Ambar, M. (*with* Upadhyaya, K. S.) Compatibility conditions for the surface of discontinuity in pseudoflow. **(80k:76052)**

Boillat, Guy (*with* Ruggeri, Tommaso) Limite de la vitesse des chocs dans les champs à densité d'énergie convexe. (English summary) **(80i:76027)**

Bowen, Ray M. (*with* Chen, P. J.) Some properties of curved shock waves in ideal fluid mixtures with multiple temperatures. (German summary) **(80k:76053)**

Chen, P. J. *See* **Bowen, Ray M., (80k:76053)**

Donato, Andrea (*with* Fusco, Domenico) The propagation of waves of discontinuities compatible with a completely nonlinear magnetoelastic model. (Italian. English summary) **(80i:73061)**

Fusco, Domenico *See* **Donato, Andrea, (80i:73061)**

Ruggeri, Tommaso *See* **Boillat, Guy, (80i:76027)**

Upadhyaya, K. S. *See* **Ambar, M., (80k:76052)**

Włodarczyk, Edward A local closed-form solution of the problem of propagation of a nonstationary plane shock wave in a polytropic medium. (Polish and Russian summaries) **(80d:76057)**

Xiao, Ling (*with* Zhang, Tong) Interactions of elementary waves in one-dimensional adiabatic flow. (Chinese. English summary) **(80k:76058)**

Zhang, Tong *See* **Xiao, Ling, (80k:76058)**

35L70 Second-order nonlinear equations and systems

Carbone, Luciano On the Darboux problem without uniqueness assumptions. (Italian summary) **80k:35051**

Citrini, Claudio Discontinuous solutions of a nonlinear hyperbolic equation with unilateral constraints. **80g:35080**

Ebihara, Yukiyoshi Some evolution equations with the quasilinear strong dissipation. **80g:35081**

Hudaverdiev, K. I. Study of a multidimensional mixed problem for a class of nonlinear abstract hyperbolic equations. (Russian. Azerbaijani and English summaries) **80e:35042**

Investigation of the classical solution of a multidimensional mixed problem for semilinear hyperbolic second-order equations. (Russian) **80h:35090**

Jerome, Joseph W. The methods of lines and the nonlinear Klein-Gordon equation. **80c:35068**

John, Fritz Blow-up of solutions of nonlinear wave equations in three space dimensions. **80d:35093**

Lar'kin, N. A. A class of quasilinear hyperbolic equations that have solutions in the large. (Russian) **80d:35094**

Nakao, Mitsuhiro (*with* Narazaki, Takashi) Existence and decay of solutions of some nonlinear wave equations in noncylindrical domains. **80e:35091**

Decay of classical solutions of a semilinear wave equation. **80m:35055**

Narazaki, Takashi *See* **Nakao, Mitsuhiro, 80b:35091**

Pikulin, V. P. A mixed problem for a weakly linear inhomogeneous hyperbolic equation. (Russian) **80j:35069**

Pogrebkov, A. K. Global solutions of Cauchy problems for the Liouville equation $\varphi_{tt}-\varphi_{xx}=-\frac{1}{2}m^2\exp\varphi$ in the case of singular initial data. (Russian) **80e:35043**

Reed, Michael C. Singularities in non-linear waves of Klein-Gordon type. **80b:35105**

Strauss, Walter Alexander Mathematical aspects of classical nonlinear field equations. **80h:35092**

Zeragija, P. K. A boundary value problem for some nonlinear hyperbolic differential equations. (Russian. Georgian and English summaries) **80b:35106**

Secondary classifications:

Alymkulov, K. *See* **Imanaliev, M. I., (80j:35006)**

Amann, Herbert (*with* Mancini, Giovanni) Some applications of monotone operator theory to resonance problems. **(80k:47072)**

Baillon, Jean-Bernard (*with* Chadam, John M.) The Cauchy problem for the coupled Schroedinger-Klein-Gordon equations. **(80d:81008)**

Chadam, John M. *See* **Ballou, Jean-Bernard, (80d:81008)**
Ebihara, Yukiyoshi On the classical solution of the initial value problem for a nonlinear wave equation. **(80i:35111)**
Hall, William S. The Rayleigh wave equation—an analysis. **(80h:35014)**
Imanaliev, M. I. (*with* Alymkulov, K.) The existence of periodic solutions of nonlinear wave equations. (Russian) **(80j:35006)**
Kielhöfer, Hansjörg Bifurcation of periodic solutions for a semilinear wave equation. **(80j:35007)**
Klimperová, Nina Periodic solutions to the inhomogeneous sine-Gordon equation. **(80h:35005)**
Mancini, Giovanni *See* **Amann, Herbert, (80h:47072)**
Nesterov, S. V. Examples of nonlinear Klein-Gordon equations that are solvable in elementary functions. (Russian) **(80h:35018)**
Sadkowski, Wawrzyniec Boundedness and stability of solutions of some hyperbolic equations. **(80d:35013)**
Yamada, Yoshio Note on certain nonlinear evolution equations of second order. **(80h:34074)**

35L75 Higher (>2) order nonlinear equations and systems

35L80 Equations and systems of degenerate type

Baranovskiĭ, F. T. A mixed problem for a second-order hyperbolic equation, strongly degenerate on the initial plane. (Russian) **80f:35080**
Evdokimov, F. F. The Cauchy problem for the equation $U_{xx}-(-y)^m U_{yy}-\lambda^2 U=0$. (Russian) **80d:35095**
Lar'kin, N. A. A class of degenerate hyperbolic equations. (Russian) **80d:35096**
Makarov, I. A. Solution of the Cauchy-Goursat problem for an equation with two lines of degeneracy of the second kind. (Russian) **80e:35044**

Secondary classifications:

Ermakov, V. I. On a boundary value problem for a nonstationary system that is connected with the Bicadze equation. (Russian) **(80g:35083)**
Imai, Masato Cauchy problems for the operator of Tricomi's type. **(80h:35098)**
Makarov, I. A. Solution of the Cauchy-Goursat problem for an equation with two lines of degeneracy of the second kind. (Russian) **(80i:35028)**

35L99 None of the above, but in this section

Gindikin, S. G. (*with* Volevič, L. R.) Sur le problème mixte pour des opérateurs différentiels $(2b+1)$-hyperboliques. (English summary) **80i:35122**
Imai, Masato (*with* Shirota, Taira) On a parametrix for the hyperbolic mixed problem with diffractive lateral boundary. **80f:35081**
Papadakis, John S. (*with* Wood, D. H.) Addendum: "An addition formula for Riemann functions" (J. Differential Equations **24** (1977), no. 3, 397–411). **80b:35107**
Petrosjan, N. S. Asymptotic behavior of the solution of the Cauchy problem for a first-order quasilinear equation as $t\to+\infty$. (Russian) **80d:35097**
Reed, Michael C. Unsolved problems in the theory of nonlinear wave equations. **80h:35093**
Shirota, Taira *See* **Imai, Masato, 80f:35081**
Vaillant, Jean Propriété de symétrie des matrices localisées d'une matrice fortement hyperbolique en un point multiple. **80d:35098**
Volevič, L. R. *See* **Gindikin, S. G., 80i:35122**
Wood, D. H. *See* **Papadakis, John S., 80b:35107**

Secondary classifications:

Allnlac, S. L. A class of hyperbolic operators with double involutive characteristics of Fuchsian type. **(80b:58059)**
Amerio, Luigi Continuous solutions of the problem of a string vibrating against an obstacle. (Italian summary) **(80h:73029)**
Băleanu, C. Effect of ion dynamics on the parametric-instabilities of a plasma. I. **(80a:82032)**
Baranger, M. (*with* Vénéroni, M.) An adiabatic time-dependent Hartree-Fock theory of collective motion in finite systems. **(80a:81054)**
Bayin, Selçuk Ş. Solutions of Einstein's field equations for static fluid spheres. **(80b:83008)**
Cooper, Jeffery Scattering of plane waves by a moving obstacle. **(80j:35077)**
Davtjan, O. K. Theory of gravitational-inertial field of universe. I. Gravitational-inertial field equations. (German summary) **(80a:83005a)**
Theory of gravitational-inertial field of universe. II. On critical systems in universe. (German summary) **(80a:83005b)**
Ebin, David G. The initial-boundary value problem for subsonic fluid motion. **(80i:76026)**
Gorskiĭ, N. M. (*with* Selivanov, I. A.) Quasilinear hyperbolic equations that are described by problems of filtration theory. (Russian) **(80c:76054)**
Homa, G. P. Partial averaging in hyperbolic systems of the standard type. (Russian) **(80h:35017)**
Jakobsen, Hans Plesner Intertwining differential operators for $\mathrm{Mp}(n, \mathbf{R})$ and $\mathrm{SU}(n, n)$. **(80f:22009)**
Kashiwara, Masaki (*with* Schapira, Pierre) Micro-hyperbolic systems. **(80b:58060)**
Kashyap, J. N. S. On static axially symmetric electrovac universes. **(80i:83012)**
Kentzer, Cz. P. Generalization of the concept of Riemann invariants for multidimensional gasdynamics. **(80i:76035)**
Lin, Jeng Eng Asymptotic behavior in time of the solutions of three nonlinear partial differential equations. **(80b:35022)**
Ni, Hao Qing Analysis of two-dimensional forced water waves. (Chinese) **(80a:76007)**
de Paris, J.-Cl. (*with* Wagschal, Claude) Problème de Cauchy non caractéristique à données Gevrey pour un opérateur analytique à caractéristiques multiples. **(80d:35005)**
Prasad, Baleshwar (*with* Rai, R. P.) On radiative boundary shock waves. **(80c:76032)**
Rai, R. P. *See* **Prasad, Baleshwar, (80c:76032)**
Razavy, M. Nonlinear wave equation for quantized frictional forces. (French summary) **(80d:81014)**
Schapira, Pierre *See* **Kashiwara, Masaki, (80b:58060)**
Schimming, Rainer Das Huygenssche Prinzip bei linearen hyperbolischen Differentialgleichungen zweiter Ordnung für allgemeine Felder. **(80d:58068)**
Selivanov, I. A. *See* **Gorskiĭ, N. M., (80c:76054)**
Taylor, Michael E. Rayleigh waves in linear elasticity as a propagation of singularities phenomenon. **(80i:73016)**
Ubertini, Lucio Mathematical model for the study of the pollution in a stream. (Italian) **(80f:76043)**
Vénéroni, M. *See* **Baranger, M., (80a:81054)**
Wagschal, Claude *See* **de Paris, J.-Cl., (80d:35005)**

35M05 Equations and systems of mixed (Tricomi, etc.) or composite type {For degenerate types, elliptic, see 35Jxx, parabolic, see 35Kxx, hyperbolic, see 35Lxx, etc.}

Abdrahmanov, M. A. *See* **Tursynbekov, S., 80f:35088**
Aziz, A. K. (*with* Schneider, Manfred) On uniqueness of Frankl-Morawetz problem in $\mathbf{R}^2$. **80a:35085**
(*with* Schneider, Manfred) Frankl-Morawetz problem in $\mathbf{R}^3$. **80i:35123**
Azovskiĭ, V. V. (*with* Gubaĭdullin, K. A.) Solution of some problems for equations of elliptic and composite type. (Russian) **80a:35086**
Bazarov, D. (*with* Meredova, M. M.) A boundary value problem for a third-order equation of mixed-composite type. (Russian) **80d:35099**
Berger, Günter Asymptotische Formeln für Eigenwerte des Tricomischen Differentialoperators erster Art mit Restgliedabschätzung. **80h:35094**
Canfora, Albino Extension and application of a surjectivity theorem of Fučík. (Italian) **80h:35095**
Chang, Ch'lu Chün (*with* Lin, Yü Pin) On weak existence of an elliptic-hyperbolic system. **80c:35069**
Chang, Y. F. Solution of a nonlinear Tricomi equation by Taylor series. **80i:35124**
Dačev, G. D. The Tricomi problem. (Russian) **80d:35100**
Boundary value problems for a class of hyperbolic-parabolic equations. (Russian) **80h:35096**
On the smoothness of the solutions of some boundary value problems for equations of mixed type. (Russian) **80i:35125**
Dublja, Z. D. The Dirichlet problem for a system of composite type that is analogous to an equation of A. V. Bicadze. (Russian) **80d:35101**
Džumisov, A. T. Uniqueness of the solution of the Tricomi problem for an equation of mixed type with strong noncharacteristic degeneracy. (Russian) **80d:35102**
Džuraev, A. D. Some space systems of first-order equations of composite type. (Russian) **80g:35082**
Džuraev, T. D. (*with* Irgašev, Ju.) The Gevrey problem for third-order mixed equations with multiple characteristics. (Russian) **80i:35126**
Eleev, V. A. The generalized Tricomi problem for mixed hyperbolic-parabolic equations. (Russian) **80f:35082**
Ermakov, V. I. On a boundary value problem for a nonstationary system that is connected with the Bicadze equation. (Russian) **80g:35083**
Goebel, Manfred Ein Sjöstrandsches Problem für die Gleichung $(\partial/\partial x)\,\Delta u=0$. **80d:35103**
Gubaĭdullin, K. A. *See* **Azovskiĭ, V. V., 80a:35086**
Hablov, V. V. A boundary value problem for higher order equations of composite type. (Russian) **80d:35104**
Hasanov, A. A generalization of a boundary value problem with displacement for an equation of mixed type. (Russian) **80f:35083**
Problems with nonlocal boundary conditions for a class of equations of mixed type. (Russian) **80h:35097**
Horošilova, V. I. Estimate of the solution of a problem with displacement. (Russian) **80c:35070**
Hubiev, R. N. A boundary value problem for a parabolic-hyperbolic equation with an unknown line of type change. (Russian) **80g:35084**
Imai, Masato Cauchy problems for the operator of Tricomi's type. **80h:35098**
Irgašev, Ju. *See* **Džuraev, T. D., 80i:35126**
Isamuhamedov, S. S. The Gellerstedt boundary value problem with discontinuous glueing conditions for a mixed type equation of the second kind. (Russian) **80j:35070**
Ivanickiĭ, I. I. A problem with nonlocal boundary conditions on the characteristics for an equation of mixed type with two intersecting lines of degeneracy. (Russian) **80i:35127a**
A boundary value problem of the type of Frankl"s problem for an equation of mixed type with two perpendicular lines of degeneracy. (Russian) **80i:35127b**
Ivaškina, G. A. (*with* Nevostruev, L. M.) A boundary value problem with displacement for an equation of the second kind. (Russian) **80g:35085**
Kal'menov, T. Š. The spectrum of the Tricomi problem for a fourth-order equation of mixed type. (Russian) **80d:35105**
Kazlev, V. M. The Tricomi problem for a loaded Lavrent'ev-Bicadze equation. (Russian) **80d:35106**
Kirilenko, S. V. Solution of a boundary value problem in a half-strip for the Euler-Darboux equation. (Russian) **80c:35071**
Krikunov, Ju. M. A boundary value problem for the equation $u_{xx}+yu_{yy}+(-n+\frac{1}{2})u_y=0$. (Russian) **80m:35056**
Langlais, Michel Solutions fortes pour une classe de problèmes aux limites du second ordre dégénérés. **80j:35071**
Lanina, T. I. Strong and smooth solutions of certain boundary value problems for an elliptic-parabolic equation. (Russian) **80g:35086**
Lar'kin, N. A. A class of nonlinear equations of mixed type. (Russian) **80e:35045**
Lin, Yü Pin On uniqueness of differential equations of mixed type. **80i:35128**
See also **Chang, Ch'lu Chün, 80c:35069**

Maĭorov, I. V. A problem for equations of mixed type with a closed line of degeneracy. (Russian) **80b:35108**

Makarov, I. A. Solution of the Cauchy-Goursat (CG) problem for an equation with two lines of degeneracy of the second kind. (Russian) **80e:35072**

Meredov, M. M. (*with* Samedov, N. I.) A boundary value problem for a fourth-order quasilinear equation of mixed type. (Russian) **80e:35073**

Meredova, M. M. *See* **Bazarov, D., 80d:35099**

Mikenkova, T. A. On the question of the solution of a nonlinear singular integral equation. (Russian) **80i:35129**

Moiseev, E. I. Uniqueness theorems for an equation of mixed type. (Russian) **80i:35130**
The Tricomi problem for the Gellerstedt equation. (Russian) **80i:35131**

Mulloev, S. (*with* Sanginov, A.) On the boundary value problem with a derivative for a system of equations of composite type with multiple characteristics. (Russian. Tajiki summary) **80g:35087**
See also **Sanginov, A., 80a:35089**

Murtazaev, D. The Riemann-Hilbert problem for a system of first-order equations of composite type with two double characteristics. (Russian. Tajiki summary) **80f:35084**

Nadžafov, H. M. A boundary value problem for a second-order linear equation of mixed type with discontinuous glueing conditions. (Russian. Azerbaijani and English summaries) **80d:35107**

Nagornyĭ, A. M. *See* **Salahitdinov, M. S., 80i:35132**

Nagno, A. F. A nonlocal problem for an equation of mixed parabolic type. (Russian) **80g:35088**

Nazarova, T. M. A variational inequality for a class of hyperbolic-parabolic equations. (Russian) **80d:35108**

Nerostruev, L. M. *See* **Ivaškina, G. A., 80g:35085**

Nikolaev, N. Ja. The N problem for an equation of mixed type in a half-plane that contains in its interior a line of singularity of the coefficients of the equation. (Russian) **80d:35109**
See also **Volkodavov, V. F., 80b:35110**

Ponomarev, S. M. The Tricomi problem for a system of mixed-type equations in the plane. (Russian) **80f:35085**
Uniqueness of the solution of the Tricomi problem for an equation of mixed type in the plane. (Russian) **80g:35089**

Popivanov, N. I. Some boundary value problems for hyperbolic-parabolic equations in multidimensional domains. (Russian) **80g:35090**

Sabirov, A. A boundary value problem for a nonlinear equation of composite type. (Russian) **80j:35072**

Salahitdinov, M. S. (*with* Nagornyĭ, A. M.) A boundary value problem for the equation $(\partial/\partial x)(\operatorname{sgn} y|y|^m u_{xx} + u_{yy}) = 0$. (Russian) **80i:35132**

Saltykova, N. M. A boundary value problem for an equation of mixed type of the second kind with displacement. (Russian) **80a:35087**

Salzmann, H. Über ein Differentialgleichungssystem vom elliptisch-hyperbolischen Typ im $\mathbf{R}^2$. I. **80a:35088**

Samedov, N. I. A boundary value problem for a fourth-order quasilinear degenerate equation of composite type. (Russian) **80f:35086**
See also **Meredov, M. M., 80c:35073**

Sanginov, A. (*with* Mulloev, S.) A boundary value problem for a system of equations of composite type with multiple characteristics. (Russian. Tajiki summary) **80a:35089**
See also **Mulloev, S., 80g:35087**

Šarifbaev, Ja. S. A problem for a third-order equation with a heat operator in the principal part. (Russian) **80d:35110**

Sasai, Takao The Cauchy problem for Tricomi's equation and the relations between generating functions and entire functions. **80h:35099**

Schneider, Manfred *See* **Aziz, A. K., 80a:35085** *and* **Aziz, A. K., 80i:35123**

Smirnov, M. M. ★Equations of mixed type. **80a:35090**
A boundary value problem of the Bicadze-Samarskiĭ type for an equation of mixed type of the second kind. (Russian. English summary) **80d:35111**

Solodovnikov, I. E. The Frankl' problem for a particular case of the equation $k(y)u_{xx} + u_{yy} = 0$. (Russian) **80f:35087**

Taimirzaev, Ju. U. A boundary value problem with general glueing conditions for an equation of mixed type with two lines of degeneracy. (Russian) **80j:35073**
The eigenvalue problem for equations of mixed type with a nonsmooth line of degeneracy. (Russian) **80g:35091**

Teichert-Gaida, Alina A non-linear problem of Sjöstrand-v. Wolfersdorf's type. **80b:35109**

Terekov, A. N. A boundary value problem for a third-order quasilinear equation of mixed-composite type. (Russian) **80d:35112**

Tursynbekov, S. (*with* Abdrahmanov, M. A.) The solvability of a certain problem of joining equations of mixed type. (Russian. Kazakh summary) **80f:35088**

Volkodavov, V. F. (*with* Nikolaev, N. Ja.) The Gellerstedt problem for a particular form of the Euler-Darboux equation. (Russian) **80b:35110**

Zaeva, R. A. Solvability of a boundary value problem for a third-order quasilinear equation of mixed-composite type. (Russian) **80f:35089**
A quasilinear equation of mixed-composite type in n-dimensional space. (Russian. Turkmen and English summaries) **80b:35111**

Secondary classifications:

Evdokimov, F. F. The Cauchy problem for the equation $U_{xx} - (-y)^m U_{yy} - \lambda^2 U = 0$. (Russian) **(80d:35095)**

Jauniauskas, Algimantas Some systems of second-order partial differential equations. (Russian) **(80f:35029)**

Lanckau, Eberhard Explizite Lösungen für Rand- und Anfangswertaufgaben bei Gleichungen gemischten Typs mit drei unabhängigen Veränderlichen. **(80i:35027)**

Langlais, Michel Solutions fortes pour des problèmes aux limites du second ordre dégénérés. **(80f:35058)**

Megrabov, A. G. Inverse problems for equations of mixed type. (Russian) **(80i:35179)**

Temirbulatov, S. I. Some ill-posed problems for an equation of composite type. (Russian. Kazakh summary) **(80i:35175)**

35Nxx Overdetermined systems [See also 58G05, 58G07, 58Hxx.]

35N05 Constant coefficients

35N10 Variable coefficients, general

Andreotti, Aldo (*with* Nacinovich, Mauro) On the envelope of regularity for solutions of homogeneous systems of linear partial differential operators. **80d:35113**

Mihailov, L. G. Some overdetermined systems of second-order partial differential equations. (Russian. Tajiki summary) **80d:35114**

Nacinovich, Mauro *See* **Andreotti, Aldo, 80d:35113**

Ruzmetov, È. Solvability of certain systems of partial differential equations. (Russian. Tajiki summary) **80g:35092**

Safarov, D. H. The dimension of the space of solutions of power growth for a class of overdetermined elliptic systems. (Russian) **80i:35133**

Schulze, B.-W. Over- and under-determined elliptic boundary value problems. (Russian) **80e:35046**

Secondary classifications:

van den Essen, Arno Le noyau de l'opérateur $\delta/\delta x_n$ agissant sur un $\mathcal{D}_n$-module. (English summary) **(80f:58041)**

Kashiwara, Masaki (*with* Schapira, Pierre) Problème de Cauchy pour les systèmes microdifférentiels dans le domaine complexe. **(80a:58031)**

Laurent, Yves Double microlocalisation et problème de Cauchy dans le domaine complexe. **(80i:58036)**

Malikov, H. M. A versal integral of type A_k and a maximally overdetermined system. (Russian. Tajiki summary) **(80h:32024)**

Ramis, Jean-Pierre Géométrie analytique et géométrie algébrique (variations sur le thème "GAGA"). **(80g:32014)**

Sambors'kiĭ, S. M. General solutions of overdetermined systems of partial differential equations. (Russian) **(80h:58062)**

Schapira, Pierre *See* **Kashiwara, Masaki, (80a:58031)**

35N15 $\bar\partial$-Neumann problem and generalizations; formal complexes [See also 32Fxx and 58G05.]

Kohn, J. J. Subelliptic estimates. **80i:35134**

Petrosjan, A. I. Solution with bound of the $\bar\partial$-equation in certain domains. (Russian. Armenian summary) **80e:35047**

Secondary classifications:

Beil, Steven R. Nonvanishing of the Bergman kernel function at boundary points of certain domains in $\mathbf{C}^n$. **(80j:32041)**

Derridj, Makloul Conditions suffisantes de sous-ellipticité pour $\bar\partial$. **(80c:32020)**
Estimations pour $\bar\partial$ dans des domaines non pseudo-convexes. (English summary) **(80b:32021)**
On some estimates for the $\bar\partial$ Neumann problem in nonpseudoconvex domains. **(80k:32023)**

Henkin, G. M. *See* **Petrosjan, A. I., (80j:32007)**

Kohn, J. J. Subellipticity of the $\bar\partial$-Neumann problem on pseudo-convex domains: sufficient conditions. **(80d:32020)**

Laville, Guy Ensembles de mesure nulle pour certaines mesures dans le groupe d'Heisenberg. (English summary) **(80d:32021)**

Petrosjan, A. I. (*with* Henkin, G. M.) Solution with a uniform estimate of the $\bar\partial$-equation in a real nondegenerate Weil polyhedron. (Russian. Armenian and English summaries) **(80j:32007)**

Phong, D. H. On integral representations for the Neumann operator. **(80h:32038)**

Stanton, Nancy K. The fundamental solution of the heat equation associated with the $\bar\partial$-Neumann problem. **(80j:58062)**

Tartakoff, David S. Local analytic hypoellipticity for $\Box_b$ on nondegenerate Cauchy-Riemann manifolds. **(80g:58045)**
Remarks on isolated degeneracies of the Levi form and the analytic hypoellipticity of $\Box_b$ and related partial differential operators. **(80g:35040)**

35N99 None of the above, but in this section

Secondary classifications:

Lieb, Ingo Beschränkte Lösungen der Cauchy-Riemannschen Differentialgleichungen auf q-konkaven Gebieten. (English summary) **(80e:32015)**

35Pxx Spectral theory and eigenvalue problems [See also 47Axx, 47Bxx, 47F05.]

35P05 General spectral theory

Bartolo, P. (*with* Fortunato, Donato) Selfadjointness and spectra of Schrödinger operators with potential unbounded below. (Italian summary) **80j:35074**

Bove, Antonio Some results of spectral theory for the Laplace operator in unbounded domains with nonregular boundary. (Italian. English summary) **80g:35093**

Brézis, Haïm (*with* Kato, Tosio) Remarks on the Schrödinger operator with singular complex potentials. **80i:35135**

Clarlet, Philippe G. (*with* Kesavan, Srinivasan) Approximation bidimensionnelle du problème de valeurs propres pour une plaque. (English summary) **80k:35052**

Donnelly, Harold (*with* Li, Peter) Pure point spectrum and negative curvature for noncompact manifolds. **80j:35075**

Evans, W. D. (*with* Zettl, A.) Dirichlet and separation results for Schrödinger-type operators. **80i:35136**

Faddeev, M. D. *See* **Pavlov, B. S.,** **80a:35092**

Fortunato, Donato Remarks on the non self-adjoint Schrödinger operator. **80c:35074**
See also **Bartolo, P.,** **80j:35074**

Gestrin, G. N. On a uniqueness theorem in a multidimensional inverse problem of spectral analysis of the Schrödinger operator in a class of analytic potentials. (Russian) **80m:35057**

Guillot, Jean-Claude (*with* Wilcox, Calvin H.) Spectral analysis of the Epstein operator. **80l:35137**

Harris, B. J. Gaps in the essential spectra of Schrödinger and Dirac operators. **80a:35091**

Hörmander, Lars Spectral analysis of singularities. **80m:35058**

Kato, Tosio *See* **Brézis, Haïm,** **80l:35135**

Kesavan, Srinivasan *See* **Clarket, Philippe G.,** **80k:35052**

Knowles, Ian On essential selfadjointness for Schrödinger operators with wildly oscillating potentials. **80f:35090**
On the existence of minimal operators for Schrödinger-type differential expressions. **80d:35115**

Li, Peter *See* **Donnelly, Harold,** **80j:35075**

Lyford, William C. Spectral analysis of the Laplacian in distorted periodic waveguides. **80f:35091**

Marčenko, A. V. Approximation of the spectrum of an elliptic operator with almost periodic coefficients. (Russian) **80h:35100**

Pavlov, B. S. (*with* Faddeev, M. D.) Construction of selfadjoint dilation for a problem with an impedance boundary condition. (Russian. English summary) **80a:35092**

Robert, Didier Propriétés spectrales d'opérateurs pseudo-différentiels. **80b:35112**

Schlüter, H. J. Über die Existenz eines diskreten Spektrums der elastischen Platte kleiner Ausbiegung bei gemischten Randbedingungen einschliesslich Randlagerung sowie Lagerung im Plattengebiet und Massenträgheiten. (English and Russian summaries) **80c:35075**

Skriganov, M. M. The Bethe-Sommerfeld conjecture. (Russian) **80l:35138**
Proof of the Bethe-Sommerfeld conjecture in dimension 2. (Russian) **80k:35053**

Weder, R. A. The unified approach to spectral analysis. **80b:35101**
The unified approach to spectral analysis. II. **80b:35102**

Wilcox, Calvin H. *See* **Guillot, Jean-Claude,** **80l:35137**

Zetti, A. *See* **Evans, W. D.,** **80l:35136**

Secondary classifications:

Allegretto, Walter Spectral estimates and oscillations of singular differential operators. **(80d:35009)**

de Bivar-Weinholtz, António (*with* Piraux, Rémi) Formule de Trotter pour l'opérateur de Schrödinger avec un potentiel singulier complexe. (English summary) **(80c:47040)**

Chazarain, Jacques Spectre d'un hamiltonien quantique et périodes des trajectoires classiques. (English summary) **(80b:58062)**

Colin de Verdière, Yves Sur le spectre des opérateurs elliptiques à bicaractéristiques toutes périodiques. (English summary) **(80b:58056)**

Garnir-Monjoie, F. S. Spectral resolution of boundary value problems in a half-space for partial differential matrix operators of the first order. **(80l:35039)**

Gazeau, J. P. (*with* Maquet, A.) Bound states in a Yukawa potential: a Sturmian group-theoretical approach. **(80f:81028)**

Helašvili, A. A. The spectrum of the logarithmic potential. (Russian. Georgian and English summaries) **(80e:81011)**

Jafaev, D. R. The singular spectrum in a system of three particles. (Russian) **(80l:81049)**

Kalf, H. Non-existence of eigenvalues of Schrödinger operators. **(80a:35029)**

Maquet, A. *See* **Gazeau, J. P.,** **(80f:81028)**

Merkur'ev, S. P. The structure of the resolvent of the Schrödinger operator for a system of three charged particles. (Russian) **(80e:81086)**

Piraux, Rémi *See* **de Bivar-Weinholtz, António,** **(80c:47040)**

Ramm, A. G. Necessary and sufficient conditions for realizability of the principle of limiting amplitude. (Russian) **(80b:47025)**

Talmirzaev, Ju. U. The eigenvalue problem for equations of mixed type with a nonsmooth line of degeneracy. (Russian) **(80g:35091)**

Werner, P. Selfadjoint extensions of the Laplace operator with respect to electric and magnetic boundary conditions. **(80l:78006)**

35P10 Completeness of eigenfunctions, eigenfunction expansions

Ašilov, P. I. The uniqueness of expansions in eigenfunctions of the Schrödinger operator. (Russian) **80h:35103**

Alimov, Š. A. The expandability of continuous functions of Sobolev classes in eigenfunctions of the Laplace operator. (Russian) **80a:35093**

Galicyn, A. S. *See* **Lukovs'kiĭ, Ĭ. O.; et al.,** **80d:35116**

Kovalenko, V. F. (*with* Semenov, Ju. A.) Some questions on expansions in generalized eigenfunctions of a Schrödinger operator with strongly singular potentials. (Russian) **80f:35092**

Lukovs'kiĭ, Ĭ. O. (*with* Žukovskiĭ, A. N.; Galicyn, A. S.) An expansion in eigenfunctions in an elliptic coordinate system and its applications. (Russian) **80d:35116**

Pulatov, A. K. On the absence of the localization of the expansion in the Laplace series of a function from the Hölder class $C^{1/2}$ on the sphere. (Russian) **80a:35094**

Semenov, Ju. A. On the theory of eigenfunctions expansion of the Schrödinger operator. **80f:35093**
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See also **Kovalenko, V. F.,** **80f:35092**

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Žukovskiĭ, A. N. *See* **Lukovs'kiĭ, Ĭ. O.; et al.,** **80d:35116**

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Gareev, F. A. *See* **Bang, J.,** **(80b:81017)**

Hoenders, B. J. On the completeness of the natural modes for quantum mechanical potential scattering. **(80c:81098)**

Holmes, Mark H. A spectral problem in hydroelasticity. **(80f:73052)**

Isaacson, David (*with* Marchesin, Dan) The eigenvalues and eigenfunctions of a spherically symmetric anharmonic oscillator. **(80f:81005)**

Joseph, Daniel D. *See* **Yoo, Jung Y.,** **(80d:76033)** *and* **Liu, C. H.,** **(80d:76034)**

Kal'mesov, T. Š. The spectrum of the Tricomi problem for a fourth-order equation of mixed type. (Russian) **(80d:35105)**

Liu, C. H. (*with* Joseph, Daniel D.) Stokes flow in conical trenches. **(80d:76034)**

Marchesin, Dan *See* **Isaacson, David,** **(80f:81005)**

Yoo, Jung Y. (*with* Joseph, Daniel D.) Stokes flow in a trench between concentric cylinders. **(80d:76033)**

35P15 Estimation of eigenvalues, upper and lower bounds

Donsker, M. D. (*with* Varadhan, S. R. S.) On the principal eigenvalue of elliptic second order differential operators. **80l:35140**

Holland, Charles J. The principal eigenvalue for linear second-order elliptic equations with natural boundary conditions. **80c:35076**

Ladevèze, J. (*with* Ladevèze, P.) Lower bounds for the fundamental free membrane eigenvalue. **80m:35059**

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Venturino, Marina The first eigenvalue of linear elliptic operators in nonvariational form. (Italian. English summary) **80a:35095**

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Embergenov, A. *See* **Meredov, H. M.,** **(80e:49033)**

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Osserman, Robert Bonnesen-style isoperimetric inequalities. **(80h:52013)**

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Vock, E. *See* **Delft, P.; et al.,** **(80k:81016)**

Widom, Harold The Laplace operator with potential on the 2-sphere. **(80d:58071)**

35P20 Asymptotic distribution of eigenvalues and eigenfunctions

Berger, Günter Asymptotic behaviour of the spectrum with remainder estimate of elliptic differential operators with a weak degeneracy. (Russian. English summary) **80l:35141**

Birman, M. Š. (*with* Solomjak, M. Z.) Asymptotic behavior of the spectrum of variational problems on solutions of elliptic equations. (Russian) **80c:35077**

Boimatov, K. H. (*with* Kostjučenko, A. G.) Asymptotic behavior of Riesz means of the spectral function of an elliptic operator. (Russian) **80f:35094**
Asymptotic behavior of the spectrum of a differential operator in the degenerate case. (Russian) **80f:35095**

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Remainder estimates for eigenvalues and kernels of pseudodifferential elliptic systems. **80f:35096**

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Kostjučenko, A. G. *See* **Boimatov, K. H.,** **80f:35094**

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American Mathematical Society Translations, Ser. 2 *See* **Birman, M. Š.; et al., (80m:46026)**

35P25 Scattering theory [See also 47A40.]

Alber, Hans-Dieter A quasi-periodic boundary value problem for the Laplacian and the continuation of its resolvent. **80e:35050**

Avron, J. E. (*with* Herbst, I. W.; Simon, Barry) Schrödinger operators with magnetic fields. I. General interactions. **80k:35054**

Cooper, Jeffery Scattering of plane waves by a moving obstacle. **80j:35077**

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Liu, Jeng Eng (*with* Strauss, Walter Alexander) Decay and scattering of solutions of a nonlinear Schrödinger equation. **80k:35056**

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Ivanov, K. I. (*with* Marinov, A. T.) Method of phase functions for the scattering on nonlocal potentials which admit the separation of variables in spheroidal coordinates. (Russian. English summary) **(80b:81093)**

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Kahane, Charles S. *See* **Ahner, John F., (80k:35063)**

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Korotjaev, E. L. *See* **Deič, V. G.; et al., (80e:47077)**

Lavrent'ev, K. K. A problem of transient wave scattering on a one-dimensional obstruction. (Russian. English summary) **(80g:78010)**

Lax, Peter D. (*with* Phillips, Ralph S.) The time delay operator and a related trace formula. **(80j:47010)**

Marinov, A. T. *See* **Ivanov, K. I., (80b:81093)**

Mittra, Raj (*with* Rahmat-Samii, Y.) A spectral domain analysis of high frequency diffraction problems. **(80k:78026)**
Nakamura, Yoshimasa On inverse scattering formula for Ernst equation. **(80m:83007)**
Ohniya, Mayumi The inverse scattering problem for the Dirac operator and the modified Korteweg-de Vries equation. **(80g:35117)**
Pavlov, B. S. A partial scattering matrix, its factorization and analyticity. (Russian) **(80e:47009)**
Phillips, Ralph S. *See* **Lax, Peter D., (80j:47010)**
Popov, M. M. Examples of exactly solvable scattering problems for a parabolic equation of diffraction theory. (Russian. English summary) **(80g:78014)**
Correctness of the problem of whispering gallery waves in the vicinity of points where the boundary becomes straight. (Russian. English summary) **(80k:35025)**
Rahmat-Samii, Y. *See* **Mittra, Raj, (80k:78026)**
Rochus, Pierre Upper bounds for the many-channel Marchenko transformation operator and its derivatives. **(80h:81018)**
Schechter, Martin The invariance principle. **(80c:47013)**
Scattering in two Hilbert spaces. **(80h:47012)**
Schmienberger, John R. Elastic waves in the half space R^2_+. **(80d:73042)**
Simon, Barry *See* **Klaus, M., (80h:81012)**
Sinha, Kalyan Relative scattering and time delay in presence of a uniform electric field. **(80g:81068)**
Širokov, Ju. M. Unified formalism for quantum and classical scattering theory. (Russian. English summary) **(80k:81149)**
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Vugal'ter, S. A. (*with* Žislin, G. M.) The discrete spectrum of the n-particle quantum system energy operator. (Russian) **(80a:81028)**
Wilcox, Calvin H. *See* **Guillot, Jean-Claude, (80c:35023)**
Yajima, Kenji The quasiclassical limit of quantum scattering theory. **(80m:81082)**
Žislin, G. M. *See* **Vugal'ter, S. A., (80a:81028)**

35P30 Nonlinear eigenvalue problems

Dobrohotov, S. Ju. (*with* Maslov, V. I.) Asymptotic behavior of a spectral boundary value problem for a nonlinear equation for a semi-conductor. (Russian) **80d:35121**
Maslov, V. I. *See* **Dobrohotov, S. Ju., 80d:35121**
Massabò, Ivar (*with* Stuart, Charles A.) Elliptic eigenvalue problems with discontinuous nonlinearities. **80f:35102**
Miersemann, Erich Über positive Lösungen von Eigenwertgleichungen mit Anwendungen auf elliptische Gleichungen zweiter Ordnung und auf ein Beulproblem für die Platte. (English and Russian summaries) **80d:35122**
Stuart, Charles A. *See* **Massabò, Ivar, 80f:35102**

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Kratochvíl, Alexander (*with* Nečas, Jindřich) Secant modulus method for the construction of a solution of nonlinear eigenvalue problems. (Italian summary) **(80i:47089)**
Nečas, Jindřich *See* **Kratochvíl, Alexander, (80i:47089)**

35P99 None of the above, but in this section

Aganović, Ibrahim An eigenvalue problem of continuum mechanics. **80j:35084**
Biollay, Yves Equation of the fixed membrane in the N-dimensional space: some remarks on the maxima of the eigenfunctions subjected to various norms. **80h:35107**
Brauner, Claude-Michel (*with* Nicolaenko, Basil) Sur des problèmes aux valeurs propres non linéaires qui se prolongent en problèmes à frontière libre. (English summary) **80g:35102**
Burnat, Marek On certain spectral problems in nonseparable Hilbert spaces. (Russian summary) **80f:35103**
Guillemin, Victor (*with* Melrose, Richard) An inverse spectral result for elliptical regions in R^2. **80f:35104**
Lobo Hidalgo, Miguel (*with* Sanchez, Enrique) Sur certaines propriétés spectrales des perturbations du domaine dans les problèmes aux limites. **80h:35108**
Melrose, Richard *See* **Guillemin, Victor, 80f:35104**
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Oročko, Ju. B. Smooth approximation of selfadjoint differential operators in divergence form with measurable bounded coefficients. (Russian) **80k:35058**
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Emamirad, H. A. *See* **Balabane, M., (80j:46063)**
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Feldman, E. A. *See* **Chavel, I., (80c:58027)**
Fenstad, Jens Erik *See* **Albeverio, Sergio; et al., (80k:34029)**
Hersch, Joseph Membranes symétriques d'égale fréquence fondamentale. (English summary) **(80g:53031)**
Høegh-Krohn, Raphael *See* **Albeverio, Sergio; et al., (80k:34029)**
Khosrovshahi, G. B. (*with* Levine, H. A.; Payne, L. E.) On the positive spectrum of Schrödinger operators with long range potentials. **(80i:35053)**
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Vugal'ter, S. A. The discrete spectrum of many-particle systems which have no stable subsystems. (Russian) **(80i:81010)**
Wasow, Wolfgang The magnitude of an adiabatic invariant of quantum mechanics. **(80h:81015)**
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35Qxx Special equations and problems [See also 35J05, 35K05, 35L05.]

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Godunov, S. K. ★Элементы механики сплошной среды. (Russian) [Elements of continuum mechanics] **(80e:73001)**
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Lidskiĭ, V. B. *See* **Gol'denveizer, A. L.; et al., (80i:73051)**
McCoy, B. J. *See* **Carbonell, R. G., (80k:82020)**
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Reinisch, Gilbert *See* **Fernandez, Jean-Claude; et al., (80k:76022)**
Tovstik, P. E. *See* **Gol'denveizer, A. L.; et al., (80i:73051)**

35Q05 Euler-Poisson-Darboux equation and generalizations

Bresters, D. W. On a generalized Euler-Poisson-Darboux equation. **80a:35101**

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35Q10 Navier-Stokes equation [See also 76D05.]

Amick, Charles J. Properties of steady Navier-Stokes solutions for certain unbounded channels and pipes. **80h:35109**
Arsen'ev, A. A. The existence of stochastic and statistical solutions of nonlinear equations. (Russian) **80b:35117**
Bardos, C. Équations de Navier-Stokes et modèle de la turbulence. (English summary) **80g:35103**
Benachour, Said Analyticité des solutions des équations d'Euler. **80f:35105**
Fabrizio, Mauro Uniqueness problems for the Navier-Stokes equations in unbounded domains. (Italian) **80d:35123**
Förste, Joachim Zur Theorie kompressibler mikropolarer Flüssigkeiten. **80a:35102**
Fursikov, A. V. *See* **Višik, M. I., 80i:35149**
Galdi, Giovanni P. (*with* Rionero, Salvatore) Continuous dependence theorems for Navier-Stokes equations in unbounded domains by the weight-function method. **80f:35106**

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Kapitanskiĭ, L. V. Group analysis of the Navier-Stokes and Euler equations in the presence of rotation symmetry and new exact solutions to these equations. (Russian) **80g:35104**

Kažihov, A. V. (*with* Nikolaev, V. B.) On the theory of Navier-Stokes equations of a viscous gas with a nonmonotone state function. (Russian) **80f:35147**

Ladyženskaja, Olga A. Some recent mathematical results concerning the Navier-Stokes equations. (Polish and Russian summaries) **80e:35081**

On formulation and solvability of boundary value problems for viscous incompressible fluids in domains with non-compact boundaries. **80e:35052**

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Morawetz, Cathleen S. A regularization for a simple model of transonic flow. **80b:35119**

Müller, Manfred W. (*with* Naumann, Joachim) On evolution inequalities of a modified Navier-Stokes type. II. (Czech summary) **80a:35103**

Naumann, Joachim On evolution inequalities of Navier-Stokes type in two dimensions. **80m:35062**

See also **Müller, Manfred W., 80a:35103**

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Pileckas, K. I. *See* **Solonnikov, V. A., 80f:35109**

Rionero, Salvatore *See* **Galdi, Giovanni P., 80f:35106**

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Sobolevskiĭ, P. E. (*with* Vasil'ev, V. V.) An ε-approximation of Navier-Stokes equations. (Russian) **80m:35063**

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Temam, Roger Qualitative properties of Navier-Stokes equations. **80d:35124**

Generic properties of Navier-Stokes equations. **80d:35125**

Vasil'ev, V. V. *See* **Sobolevskiĭ, P. E., 80m:35063**

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Berker, R. A new solution of the Navier-Stokes equation for the motion of a fluid contained between two parallel plates rotating about the same axis. (Polish and Russian summaries) **(80j:76050)**

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Caflisch, Russel E. Navier-Stokes and Boltzmann shock profiles for a model of gas dynamics. **(80g:76040)**

Clayton, B. R. (*with* Massey, B. S.) Exact similar solution for an axisymmetric laminar boundary layer on a circular cone. **(80f:76011)**

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Galdi, Giovanni P. *See* **Rionero, Salvatore, (80f:76021)**

Illner, Reinhard Global existence for two-velocity models of the Boltzmann equation. **(80j:82003)**

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Konec̆, A. I. *See* **Višik, M. I., (80g:35128)**

Lasek, A. *See* **Feuillebois, F., (80c:76021)**

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Massey, B. S. *See* **Clayton, B. R., (80f:76011)**

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Reddy, J. N. On the accuracy and existence of solutions to primitive variable models of viscous incompressible fluids. **(80b:76011)**

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Solonnikov, V. A. Solvability of the problem of the plane motion of a heavy viscous incompressible capillary fluid that partially fills a certain vessel. (Russian) **(80f:76013)**

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Vasil'ev, M. M. Determination of the flow field in a region adjacent to a streamlined body at small Reynolds number. **(80i:76019)**

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von Wahl, Wolf Die stationären Gleichungen von Navier-Stokes und semilineare elliptische Systeme. **(80f:35055)**

Über die stationären Gleichungen von Navier-Stokes, semilineare elliptische und parabolische Gleichungen. **(80h:35061)**

35Q15 Riemann-Hilbert problems [See also 30E25, 31A25, 31B20.]

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Begehr, Heinrich (*with* Gilbert, Robert P.) Piecewise continuous solutions of pseudoparabolic equations in two space dimensions. **(80d:35024)**

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35Q20 Particular equations of mathematical physics (Korteweg-de Vries, Burgers, etc.)

Ablowitz, Mark J. The inverse scattering transform—continuous and discrete, and its relationship with Painlevé transcendents. **80c:35082**

(*with* Satsuma, J.) Solitons and rational solutions of nonlinear evolution equations. **80b:35121**

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Anderson, D. (*with* Bonnedal, M.; Lisak, M.) Variational approach to strongly nonlinear Schrödinger equations. **80c:35083**

Bardos, C. (*with* Penel, P.; Frisch, Uriel; Sulem, Pierre Louis) Modified dissipativity for a nonlinear evolution equation arising in turbulence. **80f:35110**

Ondes solitaires et solitons. (Italian summary) **80e:35054**

Beirão-da-Veiga, Hugo (*with* Valli, Alberto) On the motion of a nonhomogeneous ideal incompressible fluid in an external forced field. **80i:35150**

Belov, Ju. Ja. (*with* Janenko, N. N.) A regularization of the Burgers equation. (Russian) **80h:35111**

Berestycki, Henri (*with* Lions, Pierre-Louis) Existence d'ondes solitaires dans des problèmes non-linéaires du type Klein-Gordon. (English summary) **80b:35122**

Bers, A. *See* **Kaup, David J.; et al., 80c:35086**

Boiti, M. (*with* Pempinelli, F.) Similarity solutions of the Korteweg-de Vries equation. **80d:35126**

Boldrighini, Carlo (*with* Franceschini, Valter) A five-dimensional truncation of the plane incompressible Navier-Stokes equations. **80g:35105**

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Bubnov, B. A. General boundary value problems for the Korteweg - de Vries equation in a bounded domain. (Russian) **80f:35112**

Boundary value problems for the alternative Korteweg-de Vries equation in a bounded domain. (Russian) **80i:35151**

Calogero, F. Nonlinear evolution equations solvable by the inverse spectral transform. **80g:35106**

(*with* Degasperis, A.) Conservation laws for classes of nonlinear evolution equations solvable by the spectral transform. **80b:35123**

(*with* Degasperis, A.) Extension of the spectral transform method for solving nonlinear evolution equations. **80c:35084a**

(*with* Degasperis, A.) Extension of the spectral transform method for solving nonlinear evolution equations. II. **80c:35084b**

Spectral transform and nonlinear evolution equations. **80g:35107**

(*with* Ol'šaneckiĭ, M. A.; Perelomov, A. M.) Rational solutions of the KdV equation with damping. **80h:35112**

Carbone, Luciano (*with* Valli, Alberto) Filtration through a porous nonhomogeneous medium with variable cross section. **80i:35152**

Cercignani, Carlo (*with* Greenberg, William; Zweifel, P. F.) Global solutions of the Boltzmann equation on a lattice. **80c:35085**

Čerednik, I. V. Differential equations for Baker-Ahiezer functions of algebraic curves. (Russian) **80g:35108**

Choodnovsky, David V. Équations d'évolution opératorielles complètement intégrables. (English summary) **80i:35153**

Cohen, Amy Existence and regularity for solutions of the Korteweg-de Vries equation. **80g:35109**

Couch, W. E. (*with* Torrence, R. J.) A particular N-soliton solution and scalar wave equations. **80m:35064**

Dasgupta, Brahmananda *See* **Som, B. K.; et al., 80m:35070**

Degasperis, A. Solitons, boomerons, crappons. **80i:35154**
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Dezin, A. A. A class of vector fields. (Russian) **80i:35155**

Di Blasio, Gabriella Approach to equilibrium for spatially homogeneous solutions of the Boltzmann equation. **80g:35110**

Fornberg, B. (*with* Whitham, G. B.) A numerical and theoretical study of certain nonlinear wave phenomena. **80i:35156**

Franceschini, Valter *See* **Boldrighini, Carlo, 80g:35105**

Freeman, N. C. A two-dimensional distributed soliton solution of the Korteweg-de Vries equation. **80b:35113**

Frisch, Uriel *See* **Bardos, C.; et al., 80f:35110**

Fukuda, Isamu (*with* Tsutsumi, Masayoshi) On coupled Klein-Gordon-Schrödinger equations. II. **80d:35127**

Gabov, S. A. On the property of annihilation of solitary waves described by the Whitham equation. (Russian) **80i:35157**

Gajewski, Herbert (*with* Zacharias, Klaus) On the convergence of Fourier's method for nonlinear wave-envelope equations. (German and Russian summaries) **80e:35055**

Giambò, Sebastiano (*with* Greco, Antonio; Pantano, Pietro) Sur la méthode perturbative et réductive à n-dimensions: le cas général. (English summary) **80m:35065**

Greco, Antonio *See* **Giambò, Sebastiano; et al., 80m:35065**

Greenberg, William *See* **Cercignani, Carlo; et al., 80c:35085**

Grella, G. (*with* Marinaro, M.) Special solutions of the sine-Gordon equations in 2+1 dimensions. **80e:35056**
(*with* Parmentier, R. D.) Solutions of the sine-Gordon equation in 2+0 dimensions. **80h:35114**

Gupta, M. R. *See* **Som, B. K.; et al., 80m:35070**

Haines, Christopher R. *See* **Bryan, Alan C.; et al., 80f:35111**

Hansen, P. J. (*with* Nicholson, D. R.) Simple soliton solutions. **80i:35158**

Hirota, Ryogo The Bäcklund and inverse scattering transform of the K-dV equation with nonuniformities. **80e:35057**
(*with* Wadati, Miki) A functional integral representation of the soliton solution. **80m:35066**

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Illner, Reinhard (*with* Neunzert, H.) An existence theorem for the unmodified Vlasov equation. **80j:35085**

Janenko, N. N. *See* **Belov, Ju. Ja., 80h:35111**

Jeffrey, Alan An asymptotic solution for the KdVB monotone shock wave and its generalisation. **80f:35113**

Johnson, T. L. Initial-value control of the Korteweg-de Vries equation. **80g:35112**

Kaptsov, B. V. Potential theory for an equation of small oscillations of a revolving fluid. (Russian) **80h:35115**

Kato, Tosio On the Korteweg-de Vries equation. **80d:35128**

Kaup, David J. (*with* Newell, Alan C.) The Goursat and Cauchy problems for the sine-Gordon equation. **80b:35124**
(*with* Newell, Alan C.) Evolution equations, singular dispersion relations, and moving eigenvalues. **80f:35159**
(*with* Reiman, A.; Bers, A.) Space-time evolution of nonlinear three-wave interactions. I. Interaction in a homogeneous medium. **80e:35086**

Kaĭkhov, A. V. Stabilization of solutions of the initial-boundary value problem for barotropic viscous fluid equations. (Russian) **80e:35087**

Kodama, Yuji (*with* Taniuti, Tosiya) Higher order approximation in the reductive perturbation method. III. The weakly dissipative system. **80f:35160**

Konopel'čenko, B. G. On relativistic-invariant formulation of the inverse scattering transform method. **80f:35161**

Kress, Rainer The treatment of a Neumann boundary value problem for force-free fields by an integral equation method. **80e:35088**

Krichever, I. M. (*with* Novikov, S. P.) Holomorphic vector bundles over Riemann surfaces and the Kadomcev-Petviašvili equation. I. (Russian) **80f:35162**

Kubota, Kôji (*with* Ohkubo, Toshio) On well-posedness of mixed problems for Maxwell's equations. II. **80h:35116**

Lambert, F. Explicit solutions of the Korteweg-de Vries equation without scattering data. (Italian and Russian summaries) **80f:35114**

Lange, Herbert On the time-dependent Nernst-Planck equations. **80j:35086**

Lax, Peter D. A Hamiltonian approach to the KdV and other equations. **80d:35129**
(*with* Levermore, C. David) The zero dispersion limit for the Korteweg-de Vries KdV equation. **80g:35113**

Leibbrandt, G. Solitonlike solutions of the elliptic sine-cosine equation by means of harmonic functions. **80b:35125**

Levermore, C. David *See* **Lax, Peter D., 80g:35113**

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Lisak, M. *See* **Anderson, D.; et al., 80c:35083**

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Manin, Ju. I. Matrix solitons and vector bundles over curves with singularities. (Russian) **80g:35114**

Marinaro, M. *See* **Grella, G., 80e:35056**

Medeiros, Luiz Adauto J. (*with* Menzala, Gustavo Perla) On global solutions of a nonlinear dispersive equation of Sobolev type. **80c:35090**
See also **Menzala, Gustavo Perla, 80g:35115**

Menzala, Gustavo Perla (*with* Medeiros, Luiz Adauto J.) Regular solutions for a nonlinear evolution problem. (Spanish) **80g:35115**
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Miles, John W. The asymptotic solution of the Korteweg-de Vries equation in the absence of solitons. **80d:35130**

Miyakawa, Makoto *See* **Watanabe, Shizuoka; et al., 80c:35092**

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Morozov, S. F. (*with* Sumin, V. I.) A nonlinear system of junction transfer in statistical nerve ensembles. (Russian) **80i:35163**

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Nakamura, Akira Bäcklund transform and conservation laws of the Benjamin-Ono equation. **80m:35068**

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Nicholson, D. R. *See* **Hansen, P. J., 80i:35158**

Nikolenko, N. V. Perturbations of the Korteweg-de Vries equation. (Russian) **80a:35105**

Noguchi, Akira (*with* Watanabe, Hideaki; Sakai, Kiyoshi) Solitons of the nonlinear self-dual network with saturable property. **80a:35106**

Novikov, S. P. *See* **Krichever, I. M., 80f:35162**

Ohkubo, Toshio *See* **Kubota, Kôji, 80h:35116**

Ohmiya, Mayumi On the reflectionless solutions of the modified Korteweg-de Vries equation. **80h:35118**
The inverse scattering problem for the Dirac operator and the modified Korteweg-de Vries equation. **80g:35117**

Oishi, Shin'ichi A method of constructing generalized soliton solutions for certain bilinear soliton equations. **80m:35069**

Ol'šaneckiĭ, M. A. *See* **Calogero, F.; et al., 80h:35112**

Osborne, Anthony (*with* Stuart, Allan E. G.) On the separability of the sine-Gordon equation and similar quasilinear partial differential equations. **80b:35126**

Palczewski, Andrzej Solution of the Cauchy problem for the nonlinear Boltzmann equation. (Russian summary) **80g:35111**

Pantano, Pietro *See* **Giambò, Sebastiano; et al., 80m:35065**

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Pempinelli, F. *See* **Bolti, M., 80d:35126**

Pencil, P. *See* **Bardos, C.; et al., 80f:35110**

Perelomov, A. M. *See* **Calogero, F.; et al., 80h:35112**

Povoas, M. Some remarks on Maxwell's equations. **80h:35119**

Ragnisco, O. *See* **Bruschi, M.; et al., 80a:35104**

Rautmann, Reimund On the uniqueness and stability of weak solutions of a Fokker-Planck-Vlasov equation. **80b:35127**
Die Helmholtzsche Wirbelgleichung mit einer Differenzennäherung. **80e:35058**

Reeken, Michael Classical solutions of the chain equation. I. **80f:35115a**
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Saut, Jean-Claude ★Sur des généralisations de l'équation de Korteweg-de Vries. **80a:35107**

Sava, Valeriu A. Uniqueness of weak solutions of the micropolar fluid equations. **80b:35128**

Semenov, S. P. Study of the correctness of a model of an ideal fluid taking account of the effect of temperature. (Russian) **80d:35131**

Serre, Denis Les invariants du premier ordre de l'équation d'Euler en dimension 3. (English summary) **80i:35164**

Som, B. K. (*with* Gupta, M. R.; Dasgupta, Brahmananda) Reduction of the Boussinesq type of equation to modified Hirota equation. **80m:35070**

Stuart, Allan E. G. *See* **Osborne, Anthony, 80b:35126** *and* **Bryan, Alan C.; et al., 80f:35111**

Sulem, Catherine (*with* Sulem, Pierre Louis) Quelques résultats de régularité pour les équations de la turbulence de Langmuir. (English summary) **80i:35165**

Sulem, Pierre Louis *See* **Bardos, C.; et al., 80f:35110** *and* **Sulem, Catherine, 80i:35165**

Sumin, V. I. *See* **Morozov, S. F., 80i:35163**

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Szafirski, Bolesław A method of first integrals in turbulent diffusion. (Russian summary) **80a:35108**

Taniuti, Tosiya *See* **Kodama, Yuji, 80f:35160**

Temam, Roger Nonlinear boundary value problems arising in physics. **80e:35059**
Monotone rearrangement of a function and the Grad-Mercier equation of plasma physics. **80h:35120**

Tenenblat, Keti (*with* Terng, Chuu Lian) A higher dimension generalization of the sine-Gordon equation and its Bäcklund transformation. **80b:35129**

Terng, Chuu Lian *See* **Tenenblat, Keti, 80b:35129**

Timčik, M. F. *See* **Zarubin, A. G., 80c:35093**

Torrence, R. J. *See* **Couch, W. E., 80m:35064**

Tsutsumi, Masayoshi Periodic linear systems and a class of nonlinear evolution equations. **80g:35119**
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Ural'ceva, N. N. Strong solutions of the generalized Signorini problem. (Russian) **80i:35166**

Valli, Alberto *See* **Belrão-da-Veiga, Hugo, 80i:35150** *and* **Carbone, Luciano, 80i:35152**

Vel'misov, P. A. The uniqueness of the solution of the direct Laval nozzle problem. (Russian) **80i:35167**

Visintin, Augusto Study of a free boundary filtration problem by a nonlinear variational equation. (Italian summary) **80b:35121**

Wadati, Miki Infinitesimal transformations and conservation laws; field theoretic approach to the theory of soliton. **80d:35132**

See also **Hirota, Ryogo, 80m:35066**

Watanabe, Hideaki *See* **Noguchi, Akira; et al., 80a:35106**

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35Rxx Miscellaneous topics {For equations on manifolds, see 58Gxx; for manifolds of solutions, see 58Bxx; for stochastic PDEs, see also 60H15.}

35R05 Equations with discontinuous coefficients or data

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35R10 Difference-partial differential equations, equations with time lag

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Homa, G. P. (*with* Gaeva, E. A.) The averaging method for hyperbolic integro-differential systems with fast and slow variables. (Russian) **(80i:45021)**

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35R20 Operator equations, general [See also 34Gxx, 47A50, 47H15.]

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Carroll, Robert Wayne Transmutation and separation of variables. **(80g:35023)**

Gaĭšun, I. N. On the stability of fully integrable systems in a Banach space. (Russian) **(80h:35014)**

Kartsatos, Athanassios G. Boundary value problems for abstract evolution equations. **(80i:34104)**

Sova, Miroslav Abstract Cauchy problem. **(80f:34053)**

35R25 Improperly posed problems

Atakhodzaev, M. A. Regularization of a three-dimensional ill-posed problem for the biharmonic equation. (Russian) **80e:35064**

Fajazov, K. S. The regularization of the solution of the nonhyperbolic Cauchy problem for a wave equation. (Russian) **80d:35141**

Savčenko, G. B. The correctness of a boundary value problem for a system of linear differential equations. (Russian) **80f:35121**

Sobolevskiĭ, P. E. (*with* Šteĭvil', Ė. A.) An approach to the solution of ill-posed problems. (Russian) **80h:35128**

Šteĭvil', Ė. A. *See* **Sobolevskiĭ, P. E., 80h:35128**

Talenti, Giorgio On ill-posed problems. (Italian. English summary) **80e:35065**

Temirbulatov, S. I. Some ill-posed problems for an equation of composite type. (Russian. Kazakh summary) **80i:35175**

Tihonov, A. N. Les problèmes mal posés et les problèmes mathématiques de traitement automatique de résultats d'expériences. **80m:35072**

Secondary classifications:

Antonov, A. M. (*with* Bělov, Ju. A.) The behavior of the solutions of a class of nonlinear boundary value problems with a free boundary. (Russian) **(80f:35023)**

Bělov, Ju. A. *See* **Antonov, A. M., (80f:35023)**

Šiškatskiĭ, S. P. Unicité et stabilité de problèmes de Cauchy pour des équations du second ordre. **(80e:35002)**

35R30 Inverse problems (undetermined coefficients, etc.)

Ahner, John F. (*with* Kahane, Charles S.) A note on an inverse scattering problem. **80k:35063**

Andriuščenka, J. The exactness of the solution of the inverse problem for differential equations. (Russian. English and Lithuanian summaries) **80b:35139**

Anger, Gottfried Some remarks on inverse problems in differential equations. **80g:35122**

(*with* Czerner, Regine) Solution of an inverse problem for the heat equation by methods of modern potential theory. **80i:35176**

Anikonov, D. S. On the question of the uniqueness of the solution of inverse problems for equations of mathematical physics. (Russian) **80h:35129**

Anikonov, Ju. E. ★Некоторые методы исследования многомерных обратных задач для дифференциальных уравнений. (Russian) [Some methods for the study of multidimensional inverse problems for differential equations] **80b:35140**

Uniqueness of the solution of inverse problems in classes of entire functions. (Russian) **80m:35073**

Beznoščenko, N. Ja. Existence of a solution of the problem of determining the coefficient q in the equation $u_t - \Delta u + qu = F$. (Russian) **80d:35142**

Blagoveščenskiĭ, A. S. Inverse problem of the theory of wave propagation in a stochastic medium. (Russian. English summary) **80m:35074**

Čeredničenko, V. G. Determination of the density of a body from the given potential of an elliptic equation. (Russian) **80c:35097**

Czerner, Regine *See* **Anger, Gottfried, 80i:35176**

Dümmel, Siegfried On some inverse problems for partial differential equations. **80i:35177**

Elubaev, S. A uniqueness theorem for an inverse problem for the heat equation. (Russian. Kazakh summary) **80g:35123**

A uniqueness theorem of an inverse problem for an equation of parabolic type. (Russian) **80c:35098**

Gestrin, G. N. A uniqueness theorem in a multidimensional inverse problem for the operator $-\Delta + v(r)$. (Russian. English summary) **80b:35141**

Gol'dman, N. L. A class of inverse problems for multidimensional quasilinear parabolic equations. (Russian) **80a:35115**

Isakov, B. M. The uniqueness of the solution to the inverse problem of potential theory. (Russian) **80f:35122**

Isakov, V. M. Reconstruction of a domain from scattering data. (Russian) **80i:35178**

On uniqueness of solutions for inverse problems of potential theory. **80k:35064**

Iskenderov, A. D. An inverse problem on the determination of the coefficients of a quasilinear elliptic equation. (Russian. Azerbaijani and English summaries) **80f:35123**

An inverse problem on the determination of the coefficients of an elliptic equation. (Russian) **80h:35130**

Jahno, V. G. An inverse problem for a system of parabolic equations. (Russian) **80f:35124**

An inverse problem for hyperbolic equations. (Russian) **80m:35075**

Juhl, Andreas The inverse problem for the wave equation. **80g:35124**

Kabanihin, S. I. The uniqueness of the determination of the coefficients of a hyperbolic equation. (Russian) **80f:35126**

Application of energy inequalities to an inverse problem for a hyperbolic equation. (Russian) **80f:35125**

Kahane, Charles S. *See* **Ahner, John F., 80k:35063**

Klibanov, M. V. A formulation of the inverse problem for a parabolic equation. (Russian) **80j:35092**

Inverse problems for a quasilinear parabolic equation. (Russian) **80j:35093**

Krueger, Robert J. An inverse problem for an absorbing medium with multiple discontinuities. **80b:35142**

Langmach, Hartmut On the determination of functional parameters in some parabolic differential equation. **80g:35125**

Lavrent'ev, M. M. (*with* Reznickaja, K. G.) An inverse problem with unknown source. (Russian) **80m:35076**

Linke, Hans-Peter Zwei inverse Probleme für die Wärmeleitungsgleichung im zweidimensionalen Fall. **80b:35143**

Megrabov, A. G. Inverse problems for equations of mixed type. (Russian) **80i:35179**

Pavlov, G. A. On the inverse problem of the total potential of mass. (Russian) **80d:35143**

Pierce, Alan Unique identification of eigenvalues and coefficients in a parabolic problem. **80e:35066**

Reznickaja, K. G. *See* **Lavrent'ev, M. M., 80m:35076**

Romanov, V. G. Problèmes inverses pour les systèmes hyperboliques. **80e:35099**
Inverse problems for hyperbolic systems. (Russian) **80f:35180**
Inverse problems for hyperbolic equations and energy inequalities. (Russian) **80b:35144**
A formulation of an inverse problem for first-order symmetric hyperbolic systems. (Russian) **80c:35100**
The uniqueness of the solution of an inverse problem for first-order hyperbolic systems. (Russian) **80f:35181**
Serikbaev, A. U. A two-dimensional inverse problem of the logarithmic potential of a simple layer that is close to a given one. (Russian) **80f:35182**
Stoyan, Gisbert Numerical experiments on the identification of heat conduction coefficients. **80f:35183**
Symes, William W. An inverse hyperbolic boundary value problem. **80c:35101**
Temirbulatov, S. I. A corollary to a theorem of M. M. Lavrent'ev. (Russian) **80m:35077**
Tihonov, N. A. A problem of determining the nonlinear coefficient of a differential equation. (Russian) **80j:35094**
Uzlov, A. E. Existence and uniqueness theorems for the solutions of inverse problems for second-order equations of parabolic type. (Russian) **80c:35102**

Secondary classifications:

Anger, Gottfried (*with* Czerner, Regine) The extreme measures in the inverse problem of the heat equation. **(80g:31002)**
Anikonov, Ju. E. Formulas and inequalities in an inverse kinematic problem. (Russian) **(80j:53015)**
Bamberger, A. (*with* Chavent, Guy; Lailly, P.) About the stability of the inverse problem in 1-D wave equations—applications to the interpretation of seismic profiles. **(80b:86002)**
Bukgeim, A. L. Volterra type equations and inverse problems. (Russian) **(80k:45002)**
Chavent, Guy *See* **Bamberger, A.; et al., (80b:86002)**
Coraille, Henri An inversionlike integral equation in the multidimensional case. **(80d:45002)**
Czerner, Regine *See* **Anger, Gottfried, (80g:31002)**
Denisov, A. M. (*with* Semenko, E. V.; Haleeva, I. V.) The incorrectness of the inverse scattering problem. (Russian) **(80a:34021)**
Erohin, G. A. (*with* Kočerževskiĭ, V. G.) On the question of the solvability of certain inverse diffraction problems. (Russian. English summary) **(80a:78022)**
Gerontopoulos, P. ★Molodensky's problem in the plane. **(80c:86005)**
Glasko, V. B. (*with* Strahov, V. N.) The uniqueness problem in some inverse problems of geophysics. (Russian) **(80d:86003)**
Haleeva, I. V. *See* **Denisov, A. M.; et al., (80a:34021)**
Kleščev, A. G. (*with* Lisin, A. M.) The solution of a distance problem of acoustics. (Russian) **(80k:76068)**
Kočerževskiĭ, V. G. *See* **Erohin, G. A., (80a:78022)**
Lailly, P. *See* **Bamberger, A.; et al., (80b:86002)**
Lisin, A. M. *See* **Kleščev, A. G., (80k:76068)**
Menzala, Gustavo Perla On inverse scattering for the wave equation with a potential term via the Lax-Phillips theory: a simple proof. **(80d:35120)**
Michel, Bernd About inverse problems in continuum mechanics and solid state physics. **(80f:73009)**
Mirsalimov, V. M. An inverse inhomogeneous problem of grid bending. (Russian. Azerbaijani and English summaries) **(80d:73097)**
Semenko, E. V. *See* **Denisov, A. M.; et al., (80a:34021)**
Strahov, V. N. Solution of a direct two-dimensional gravimetry problem. (Russian) **(80f:86007)**
See also **Glasko, V. B., (80d:86003)**
Tihonov, N. A. Determining the characteristic of evaporation. (Russian) **(80b:76039)**
Weston, Vaughan H. Electromagnetic inverse problem. **(80g:78016)**
Nonlinear approach to inverse scattering. **(80h:78010)**

35R35 Free boundary problems

Acker, Andrew Some free boundary optimization problems and their solutions. **80m:35078**
Baumeister, Johann On the treatment of free boundary problems with the heat equation via optimal control. **80h:35131**
Borodin, M. O. A one-phase quasistationary Stefan problem. (Russian) **80j:35095**
Evans, Lawrence C. (*with* Friedman, Avner) Regularity and asymptotic behavior of two immiscible fluids in a one-dimensional porous medium. **80g:35126**
Friedman, Avner *See* **Evans, Lawrence C., 80g:35126**
Gastaldi, Fabio About the possibility of setting Stefan-like problems in variational form. (Italian summary) **80c:35103**
Jakubov, S. *See* **Kružkov, S. N., 80c:35104**
Kružkov, S. N. (*with* Jakubov, S.) Solvability of a certain class of problems with an unknown boundary for the heat equation; the asymptotic behavior of solutions as $t \to +\infty$. (Russian. Uzbek summary) **80c:35104**
Rubinstein, L. The Stefan problem: comments on its present state. **80j:35096**
Tao, L. N. The analyticity of solutions of the Stefan problem. **80f:35184**

Secondary classifications:

Bogatyrev, V. A. Solvability of a nonlinear problem with free boundary. (Russian) **(80j:35042)**
Caffarelli, Luis A. (*with* Friedman, Avner) The free boundary for elastic-plastic torsion problems. **(80f:35059)**
Daniljuk, I. I. (*with* Olĭnik, M. V.) Theorem on the uniqueness of a certain nonlinear problem with free boundary. (Russian) **(80j:35087)**
Friedman, Avner *See* **Caffarelli, Luis A., (80f:35059)**
Jakubov, S. *See* **Kružkov, S. N., (80d:35070)**
Kružkov, S. N. (*with* Jakubov, S.) Solvability of a class of problems with unknown boundary for the heat equation and behavior of the solutions as the time increases to ∞. (Russian) **(80d:35070)**
Minenko, O. S. A thermophysical problem with a free boundary. (Russian. English summary) **(80i:35067)**
Olĭnik, M. V. *See* **Danilĭuk, I. I., (80j:35087)**
Rundell, William The Stefan problem for a pseudo-heat equation. **(80b:35086)**
Salei, S. V. Global solvability of a Stefan problem. (Russian. English summary) **(80i:35088)**
Tait, R. J. Additional pseudosimilarity solutions of the heat equation in the presence of moving boundaries. **(80j:35045)**
Tao, L. N. Free boundary problems with radiation boundary conditions. **(80f:35021)**
Zolesio, Jean-Paul Solution variationnelle d'un problème de valeur propre non linéaire et frontière libre en physique des plasmas. (English summary) **(80e:35060)**

35R45 Differential inequalities

Ancona, Alano Une propriété d'invariance des ensembles absorbants par perturbation d'un opérateur elliptique. **80d:35144**
Biroli, Marco Une estimation dans $\mathcal{L}^p(\Omega)$ du gradient de la solution d'une inéquation elliptique du second ordre. (English summary) **80d:35145**

Secondary classifications:

Kamont, Zdzisław On inequalities between solutions of first order partial differential-functional equations. **(80f:35171)**
Paskov, A. A. Bounded and almost periodic solutions of evolution variational inequalities. (Russian) **(80j:47083)**
Simionescu, Clandia Lidia Note on a differential inequality. (Romanian summary) **(80f:35025)**
Ural'ceva, N. N. Strong solutions of the generalized Signorini problem. (Russian) **(80f:35166)**

35R60 Equations and systems with randomness

Bensoussan, Alain (*with* Lions, Jacques-Louis; Papanicolaou, George C.) Boundary layer analysis in homogeneization of diffusion equations with Dirichlet conditions in the half space. **80g:35127**
Komeč, A. I. *See* **Višik, M. I., 80g:35128**
Lions, Jacques-Louis *See* **Bensoussan, Alain; et al., 80g:35127**
Papanicolaou, George C. *See* **Bensoussan, Alain; et al., 80g:35127**
Višik, M. I. (*with* Komeč, A. I.) The solvability of the Cauchy problem for Kolmogorov's direct equation that corresponds to a stochastic equation of Navier-Stokes type. (Russian) **80g:35128**

Secondary classifications:

Bahvalov, N. S. (*with* Zlotnik, A. A.) Coefficient stability of differential equations and the averaging of equations with random coefficients. (Russian) **(80e:60077)**
Barabanenkov, Ju. N. Development of kinetic equations in the theory of stochastic dynamical systems, based on properties of cumulant functions of the perturbation Hamiltonian. (Russian) **(80h:82013)**
Cetto, A. M. *See* **de la Peña Auerbach, Luis, (80a:81061)**
Friedman, Avner Interaction between stochastic differential equations and partial differential equations. **(80k:60077)**
Gihman, I. I. A mixed problem for a second-order stochastic partial differential equation of parabolic type. (Russian. English summary) **(80g:60061)**
Kolomiĕc', V. G. Random oscillations of nonlinear systems with distributed parameters. (Russian) **(80d:70048)**
Kozlov, S. M. Averaging of random structures. (Russian) **(80e:60078)**
Krylov, N. V. Passage to the limit in parabolic Bellman equations. (Russian) **(80h:35066)**
de la Peña Auerbach, Luis (*with* Cetto, A. M.) Quantum mechanics derived from stochastic electrodynamics. **(80a:81061)**
Sentis, Rémi Approximation et homogénéisation d'un processus de transport. (English summary) **(80k:60098)**
Szafirski, Bolesław A method of first integrals in turbulent diffusion. (Russian summary) **(80a:35108)**
Ugowski, Henryk On a random linear parabolic equation. **(80a:60082)**
Walk, H. Martingales and the Robbins-Monro procedure in $D[0, 1]$. **(80g:62066)**
Zlotnik, A. A. *See* **Bahvalov, N. S., (80e:60077)**

35R99 None of the above, but in this section

Braičev, G. G. (*with* Moržakov, V. V.) Applicability of operators of infinite order in partial differential equations. (Russian) **80c:35105**
Hamilton, Eugene P. Antiderivatives and potentials of local differential operators. **80a:35116**
Moržakov, V. V. *See* **Braičev, G. G., 80c:35105**
Sablé-Tougeron, Monique Problème d'évolution parabolique pour une classe d'opérateurs elliptiques et dégénérés. (English summary) **80b:35145**

Secondary classifications:

Bachelet, Catherine Méthodes de contrôle optimal pour la résolution d'équations de Monge-Ampère généralisées. (English summary) **(80d:32012)**
Creangă, Ion Sur l'équation: $Dy = F(x, y) \cdot Dx$ dans une algèbre réelle. **(80f:35006)**
Goldstein, Jerome A. Nonlinear semigroups and nonlinear partial differential equations. **(80e:47056)**
Kashiwara, Masaki (*with* Schapira, Pierre) Problème de Cauchy pour les systèmes d'équations différentielles et microdifférentielles dans le domaine complexe. **(80b:58044)**
Kohler, Werner E. The rapid reaction of two chemical species in the presence of weak random advection and molecular diffusion. **(80e:80011)**
Lemaire, Luc Applications harmoniques de surfaces riemanniennes. **(80h:58024)**

Poltjakov, V. P. On the theory of upper and lower solutions and the solvability of quasilinear integro-differential equations. (Russian) (80a:45022)
Roginski, Jan Partial differential equations and dynamical systems. (80a:58029)
Schapira, Pierre *See* Kashiwara, Masaki, (80h:58044)
Schuss, Zeev Backward and degenerate parabolic equations. (80a:35060)
Simon, Barry Classical boundary conditions as a technical tool in modern mathematical physics. (80a:81046)
Temirbulatov, S. I. Conditionally well-posed problems for the wave equation. (Russian) (80b:35083)
Zisl, Eliahu Surjectivité dans les espaces en dualité. (80d:47082)

35Sxx Pseudodifferential operators [See also 47G05, 58G15.]

Secondary classifications:

Šubin, M. A. ★Псевдодифференциальные операторы и спектральная теория. (Russian) [Pseudodifferential operators and spectral theory] (80b:47057)

35S05 General theory

Baouendi, M. S. (*with* Goulaouic, C.) Analyticité précisée d'opérateurs intégraux. 80m:35079
Boutet de Monvel, Louis Convergence dans le domaine complexe des séries de fonctions propres. 80f:35185
Córdoba, Antonio Wave packets and F.I.O. 80m:35080
(*with* Fefferman, Charles Louis) Wave packets and Fourier integral operators. 80a:35117
Damlakhi, Mourtafa Analyticité et itérés d'opérateurs pseudo-différentiels. 80m:35081
Fefferman, Charles Louis *See* Córdoba, Antonio, 80a:35117
Goulaouic, C. *See* Baouendi, M. S., 80m:35079
Hounie, Jorge G. Microlocal estimates for a class of pseudodifferential operators. 80k:35065
Karasev, M. V. (*with* Nazaĭkinskiĭ, V. E.) Quantization of rapidly oscillating symbols. (Russian) 80j:35097
Melrose, Richard Airy operators. 80a:35118
Meyer, Yves Nouvelles estimations pour les opérateurs pseudo-différentiels. 80a:35119
Nazaĭkinskiĭ, V. E. *See* Karasev, M. V., 80j:35097
Parenti, Cesare (*with* Rodino, Luigi) A pseudo differential operator which shifts the wave front set. 80a:35120
Patissier, Guy Sur les fonctions d'un opérateur pseudo-différentiel elliptique. 80g:35129
Plamenevskiĭ, B. A. Meromorphic pseudodifferential operator-valued functions. (Russian) 80f:35186
Popivanov, P. R. Some local and semi-global properties of linear pseudo-differential equations with double characteristics. 80c:35106
Local properties of pseudodifferential operators with multiple characteristics. (Russian) 80m:35082
(*with* Popov, G. St.) Microlocal properties of the class of pseudodifferential equations of nonprincipal type. (Russian) 80f:35187
Local properties of pseudodifferential operators with double involutory characteristics. (Russian) 80g:35130
Popov, G. St. *See* Popivanov, P. R., 80f:35187
Rabinovič, V. S. The Cauchy and Goursat problems for a class of nonhypoelliptic pseudodifferential operators. (Russian) 80e:35067
Rodino, Luigi *See* Parenti, Cesare, 80a:35120
Thompson, Mark Coercive inequalities for pseudodifferential operators of constant rank. 80a:35121
Zaidman, Samuel Some inequalities for Kohn-Nirenberg pseudo-differential operators. 80c:35107

Secondary classifications:

Alinhac, S. L. Branching of singularities for a class of hyperbolic operators. (80f:35012)
Asada, Kenji (*with* Fujiwara, Daisuke) On some oscillatory integral transformations in $L^2(\mathbf{R}^n)$. (80d:47076)
Beals, Richard Correction to: "Characterization of pseudodifferential operators and applications" (Duke Math. J. 44 (1977), no. 1, 45–57). (80b:47062)
Boĭmatov, K. H. Pseudodifferential operators with operator symbol. (Russian) (80d:47077)
Bony, Jean-Michel Calcul symbolique et singularités des solutions des équations aux dérivées partielles non linéaires. (80f:35046)
Bourdaud, Gérard Régularité du commutateur de deux opérateurs pseudo-différentiels peu réguliers. (English summary) (80m:47046)
Croc, Elisabeth (*with* Dermenjian, Yves; Iftimie, Viorel) Une classe d'opérateurs pseudo-différentiels partiellement hypoelliptique-analytiques. (80d:35037)
(*with* Dermenjian, Yves; Iftimie, Viorel) Une classe d'opérateurs pseudo-différentiels partiellement hypoelliptique-analytiques. (80e:35014)
Dermenjian, Yves *See* Croc, Elisabeth; et al., (80d:35037) *and* Croc, Elisabeth; et al., (80e:35014)
Fefferman, Charles Louis (*with* Phong, D. H.) On positivity of pseudo-differential operators. (80b:47064)
Fujiwara, Daisuke *See* Asada, Kenji, (80d:47076)
Grubb, Gerd Remainder estimates for eigenvalues and kernels of pseudodifferential elliptic systems. (80f:35096)
Helffer, Bernard (*with* Nourrigat, Jean François) Construction de paramétrixes pour une nouvelle classe d'opérateurs pseudodifférentiels. (80e:35015)
Hirschowitz, André Transmission et symbole sous-principal. (English summary) (80d:58066)
Hörmander, Lars The Weyl calculus of pseudodifferential operators. (80j:47060)
Iftimie, Viorel *See* Croc, Elisabeth; et al., (80d:35037) *and* Croc, Elisabeth; et al., (80e:35014)
Kumano-go, Hitoshi (*with* Nagase, Michihiro) Pseudo-differential operators with non-regular symbols and applications. (80b:47066)
Laurent, Yves ★Existence d'une solution à spectre singulier imposé pour une classe d'opérateurs pseudo-différentiels. (80b:58054)
Nagase, Michihiro *See* Kumano-go, Hitoshi, (80b:47066)
Nourrigat, Jean François *See* Helffer, Bernard, (80e:35015)
Phong, D. H. *See* Fefferman, Charles Louis, (80b:47064)
Plamenevskiĭ, B. A. On the algebra of pseudo-differential operators in spaces with weight norms. (Russian) (80a:47082)
Rangelov, C. V. An a priori estimate and hypoellipticity of a certain class of pseudodifferential operators with multiple characteristics. (Russian. English summary) (80d:35039)
Schapira, Pierre Conditions de positivité dans une variété symplectique complexe. Applications à l'étude des microfonctions. (English summary) (80k:32025)
Unterberger, André Encore des classes de symboles. (80f:58038)
Décompositions spectrales approchées associées à une famille d'oscillateurs harmoniques. (English summary) (80b:58069)
Sur la continuité L^2 des opérateurs pseudo-différentiels. (English summary) (80c:47043)
Zanichelli, Maria Camilla A class of pseudodifferential operators. (Italian. English summary) (80g:47055)

35S10 Initial value problems

Alinhac, S. L. (*with* Baouendi, M. S.) Unicité pour le problème de Cauchy à partir d'une surface partout caractéristique; applications. 80e:35068
Baouendi, M. S. , *See* Alinhac, S. L., 80e:35068
Ôaku, Toshinori Micro-local Cauchy problems and local boundary value problems. 80d:35146

Secondary classifications:

Kumano-go, Hitoshi Fundamental solution for a hyperbolic system with diagonal principal part. (80j:35063)
Lascar, Bernard Le noyau de l'équation des ondes sur une variété riemannienne compacte comme intégrale de chemins. (80d:58067)
Lascar, Richard Paramétrices microlocales pour un problème de Cauchy à multiplicité variable. (English summary) (80b:35096)
Sjöstrand, Johannes Sur la propagation des singularités analytiques pour certains problèmes de Dirichlet. (English summary) (80c:58026)

35S15 Boundary value problems

Panič, O. I. The connection of conjugate boundary value problems with mutually conjugate pseudodifferential equations on the boundary of the domain. (Russian) 80f:35188
Rempel, Stephan On pseudodifferential operators smooth on manifolds with boundary. 80f:35189

Secondary classifications:

Boutet de Monvel, Louis Lacunas and transmissions. (80k:58092)
Fedoriuk, M. V. Asymptotic behavior of the Green function of a pseudodifferential parabolic equation. (Russian) (80g:35018)
Melrose, Richard (*with* Sjöstrand, Johannes) Propagation de singularités pour des problèmes aux limites d'ordre 2. (80d:35088)
Ôaku, Toshinori Micro-local Cauchy problems and local boundary value problems. (80d:35146)
Sjöstrand, Johannes *See* Melrose, Richard, (80d:35088)

35S99 None of the above, but in this section

Secondary classifications:

Patissier, Guy Déformations différentielles à coefficients constants. (English summary) (80f:58048)

39–XX FINITE DIFFERENCES AND FUNCTIONAL EQUATIONS

39–01 Elementary exposition, textbooks

Berg, Lothar ★Differenzengleichungen zweiter Ordnung mit Anwendungen. 80k:39001
Vadnal, Alojzij ★Osnove diferenčnega računa. (Slovenian) [Foundations of differential calculus] 80f:39001

Secondary classifications:

Eichhorn, Wolfgang ★Functional equations in economics. (80e:90034)

39–02 Advanced exposition (research surveys, monographs, etc.)

(Buiumbatti, Wirun) *See* Dhombres, Jean, 80j:39001
Dhombres, Jean ★Some aspects of functional equations. 80j:39001

39–03 Historical (must also be assigned at least one classification number from Section 01)

39–04 Explicit machine computation and programs (not the theory of computation or programming)

39–06 Proceedings, conferences, etc.

39Axx Finite differences [See also 65–XX.]

39A05 General

Jaiyeolaa, S. B. Majorant properties of solutions of difference equations. **80f:39002**

Secondary classifications:

Carlitz, Leonard Some polynomials related to Fibonacci and Eulerian numbers. **(80c:10013)**
(Gary, John) *See* **Gustafsson, Bertil, (80m:65082)**
Gustafsson, Bertil Comment on: "On boundary conditions for hyperbolic difference schemes" [J. Comput. Phys. **26** (1978), no. 3, 339–351; MR **58** #13765] by John Gary. **(80m:65082)**
Vadnal, Alojzij ★Osnove diferenčnega računa. (Slovenian) [Foundations of differential calculus] **(80f:39001)**
Zeitlin, David An inequality for a class of polynomials. **(80a:26004)**

39A10 Difference equations

Airikovič, A. A. The Pólya-Mammana factorization of a linear matrix difference operator. I. (Russian) **80b:39001a**
The Pólya-Mammana factorization of a linear matrix difference operator. II. (Russian) **80b:39001b**
Antippa, Adel F. (*with* Nguyen Ky Toan) Topological solution for systems of simultaneous linear equations. **80j:39002**
Bank, Steven B. On the hypertranscendence of meromorphic solutions of certain functional equations. **80b:39002**
Bučko, Zygmunt Analogie der Lösungsmethoden von Differenzen und Differentialgleichungen mit konstanten Koeffizienten. **80g:39001**
Bykov, Ja. V. (*with* Merzljakova, G. D.) Oscillatory properties of a class of equations in finite differences of first order. (Russian) **80g:39002**
Edgar, G. A. (*with* Rosenblatt, J. M.) Difference equations over locally compact abelian groups. **80i:39001**
Fitzpatrick, W. J. (*with* Grimm, L. J.) Convergent factorial series solutions of linear difference equations. **80f:39003**
Gainullin, M. N. *See* **Zakirov, F. K., 80a:39002**
Grimm, L. J. *See* **Fitzpatrick, W. J., 80f:39003**
Guseinov, G. Š. The inverse problem for a nonselfadjoint second-order difference equation on the line with respect to a generalized spectral matrix. (Russian. Azerbaijani and English summaries) **80f:39004**
Ikeda, Hideo *See* **Tanaka, Sen-ichiro, 80i:39003**
Kondev, N. M. On the coefficients of a certain power series. (Bulgarian. Russian and English summaries) **80k:39001**
Kröger, H. Periodizitätsverhalten Boole'scher Differenzengleichungen. **80f:39005**
Maggu, P. L. (*with* Mehta, O. P.) On procedure steps of complementary solutions for particular type of double-suffixed difference equations. **80j:39003**
Mednyh, A. D. A class of difference equations with polynomial coefficients. (Russian) **80a:39001**
Mehta, O. P. *See* **Maggu, P. L., 80j:39003**
Merzljakova, G. D. *See* **Bykov, Ja. V., 80g:39002**
Nguyen Ky Toan *See* **Antippa, Adel F., 80j:39002**
Patula, William T. Growth and oscillation properties of second order linear difference equations. **80f:39006**
Growth, oscillation and comparison theorems for second-order linear difference equations. **80j:39004**
Rosenblatt, J. M. *See* **Edgar, G. A., 80i:39001**
Scaravelli, Corrado Solutions of prederivative equations and linear homogeneous differential equations with constant coefficients. **80j:39005**
Schroth, P. Hauptlösungen von Differenzengleichungen. (Serbo-Croatian and English summaries) **80i:39002**
Tanaka, Sen-ichiro (*with* Ikeda, Hideo) On the general solutions of the difference equations $y_j(x+1)=\Pi_{j=1}^{m}(y_j(x))^{A_{ij}}f_i(x, y(x))$. II. **80i:39003**
Zakirov, F. K. (*with* Gainullin, M. N.) On the theory of the oscillation of the solutions of the difference equation $\Delta[r(n)\Delta^{m-1}y(n)] = f(n, y(n), y(n+1), \cdots, y(n+m))$. I. (Russian) **80a:39002**

Secondary classifications:

Berg, Lothar ★Differenzengleichungen zweiter Ordnung mit Anwendungen. **(80k:39001)**
Britton, J. L. On the conjugacy problem and difference equations. **(80k:20039)**
Campbell, Stephen L. Limit behavior of solutions of singular difference equations. **(80c:93066)**
Fisher, Michael E. (*with* Kloeden, P. E.) Asymptotic behaviour of a class of discontinuous difference equations. **(80a:39003)**
Hyers, D. H. A note on Fréchet's definition of "polynômes abstraits". **(80b:46050)**
Il'jasov, K. Periodic solutions of linear systems of difference equations. (Russian) **(80m:39002)**
Jentsch, Werner Bemerkung zu den diskret-analytischen Funktionen. **(80a:30059)**
Kaplan, James L. (*with* Yorke, James A.) Chaotic behavior of multidimensional difference equations. **(80k:58074)**
Kloeden, P. E. *See* **Fisher, Michael E., (80a:39003)**
Kohno, Mitsuhiko A two point connection problem. **(80i:34006)**
Marmeristein, I. I. A property of the spectrum of a family of linear operators and its applications to the study of solutions of difference and operator equations. (Russian) **(80k:47004)**
Matano, Hiroshi *See* **Yamaguti, Masaya, (80d:58043)**
Minjuk, S. A. (*with* Stepanjuk, N. N.) On the theory of pointwise completeness of linear systems with lag. (Russian) **(80i:34129)**
Moroşanu, Gheorghe Second-order difference equations of monotone type. **(80h:47060)**
Oberhofer, Walter Stabilität nichtlinearer Differenzengleichungssysteme. **(80b:90036)**
Pachpatte, B. G. On some new discrete inequalities and their applications to a class of sum-difference equations. **(80e:39008)**
A note on some new nth order discrete inequalities. **(80h:39004)**
Smith, A. C. Asymptotic estimates of sums of series using difference equations. **(80d:40001)**
Snow, Donald R. Formulas for sums of powers of integers by functional equations. **(80a:10005)**
Stepanjuk, N. N. Some problems of controllability and observability of two-parameter discrete systems. (Russian) **(80b:93030)**
See also **Minjuk, S. A., (80i:34129)**
Yamaguti, Masaya (*with* Matano, Hiroshi) Euler's finite difference scheme and chaos. **(80d:58043)**
Yorke, James A. *See* **Kaplan, James L., (80k:58074)**

39A11 Stability of difference equations

Ahmadi, Goodarz On the mean square stability of linear difference equations. **80e:39001**
Diamond, Phil Discrete Liapunov functions with $\Delta^2 V > 0$. **80d:39001**
Èglite, D. A. The stability of linear stochastic difference systems. (Russian) **80d:39002**
Fisher, Michael E. (*with* Kloeden, P. E.) Asymptotic behaviour of a class of discontinuous difference equations. **80a:39003**
Jasko, F. F. On the question of conditional stability of systems of difference equations. (Russian. English summary) **80i:39004**
Kazeeva, N. I. (*with* Šimanov, S. N.) A study of the stability of systems of difference equations in the critical case of one as a double root. (Russian) **80g:39003**
Kloeden, P. E. *See* **Fisher, Michael E., 80a:39003**
Šimanov, S. N. *See* **Kazeeva, N. I., 80g:39003**
Talpalaru, Pavel Growth properties of difference equations. (Romanian summary) **80j:39006**

Secondary classifications:

Marmeristein, I. I. The relation between the stability of some differential boundary value problems and of the difference problems corresponding to them. (Russian) **(80f:35013)**
Straffin, Philip D., Jr. Periodic points of continuous functions. **(80h:58043)**

39A12 Discrete version of topics in analysis

Andreev, V. B. The asymptotic behavior of the solution of the discrete Laplace equation in an angle. (Russian) **80m:39001**
Hartman, Philip Difference equations: disconjugacy, principal solutions, Green's functions, complete monotonicity. **80a:39004**
Il'jasov, K. Periodic solutions of linear systems of difference equations. (Russian) **80m:39002**
Korobicyn, V. A. (*with* Libin, È. E.) The exact solution of a difference Cauchy problem (Russian) **80h:39003**
Libin, È. E. *See* **Korobicyn, V. A., 80h:39003**
Pachpatte, B. G. A note on some new nth order discrete inequalities. **80h:39004**

Secondary classifications:

Abatut, J. L. *See* **Bernussou, J.; et al., (80c:34050)**
Ablowitz, Mark J. The inverse scattering transform—continuous and discrete, and its relationship with Painlevé transcendents. **(80c:35082)**
Bernussou, J. (*with* Hsu, Liu; Abatut, J. L.) Sur le cas critique à deux multiplicateurs réels dans une transformation ponctuelle non linéaire du second ordre. **(80c:34050)**
Bolley, Catherine (*with* Crouzeix, Michel) Conservation de la positivité lors de la discrétisation des problèmes d'évolution paraboliques. **(80h:35070)**
Bruschi, M. (*with* Levi, D.; Ragnisco, O.) Discrete version of the modified Korteweg-de Vries equation with x-dependent coefficients. (Italian summary) **(80a:35104)**
Chaudhuri, A. Roy *See* **Chaudhuri, Kasturi Roy; et al., (80d:81113)**
Chaudhuri, Kasturi Roy (*with* Chaudhuri, A. Roy; Roy, T.) Quantisation of soliton solution of a generalised discrete non-linear equation. **(80d:81113)**
Clerc, René-Louis (*with* Hartmann, Christian) Quelques propriétés de certaines singularités unidimensionnelles d'une récurrence autonome du second ordre. (English summary) **(80j:58053)**
Crouzeix, Michel *See* **Bolley, Catherine, (80h:35070)**
Fitzpatrick, W. J. (*with* Grimm, L. J.) Convergent factorial series solutions of linear difference equations. **(80f:39003)**
Gainullin, M. N. *See* **Zakirov, F. K., (80a:39002)**
Greenberg, J. M. (*with* Hassard, Brian; Hastings, S. P.) Pattern formation and periodic structures in systems modeled by reaction-diffusion equations. **(80c:92030)**
Grimm, L. J. *See* **Fitzpatrick, W. J., (80f:39003)**
Hale, Jack K. Stability in linear systems of difference and differential-difference equations. **(80h:34102)**
Hartmann, Christian *See* **Clerc, René-Louis, (80j:58053)**
Hassard, Brian *See* **Greenberg, J. M.; et al., (80c:92030)**
Hastings, S. P. *See* **Greenberg, J. M.; et al., (80c:92030)**
Hsu, Liu *See* **Bernussou, J.; et al., (80c:34050)**
Kaliski, Martin E. *See* **Klein, Quentin L., (80e:93025a)**
Klein, Quentin L. (*with* Kaliski, Martin E.) Functional equivalence in a class of autonomous one-dimensional nonlinear discrete-time systems. **(80e:93025a)**
Levi, D. *See* **Bruschi, M.; et al., (80a:35104)**
Mednyh, A. D. A class of difference equations with polynomial coefficients. (Russian) **(80a:39001)**
Mira, Christian Accumulations de bifurcations et "structures boîtes emboîtées" dans les récurrences et transformations ponctuelles. **(80d:58047)**
Orfanidis, S. J. Discrete sine-Gordon equations. **(80d:81064)**
Pachpatte, B. G. On some fundamental integro-differential inequalities and their discrete analogues. **(80k:45013)**

Ragusco, O. *See* **Bruschi, M.; et al., (80a:35104)**

Romanova, S. E. Solution of a mixed boundary value problem for the Laplace difference equation on stepped domains via the Schwartz alternating method. (Russian) **(80g:65124)**

Roscoe, D. F. The numerical solution of the Navier-Stokes equations for a three-dimensional laminar flow in curved pipes using finite-difference methods. **(80a:76022)**

Roy, T. *See* **Chaudhuri, Kasturi Roy; et al., (80d:81113)**

Tjurin, V. M. Invertibility of linear difference operators with almost periodic coefficients in a space of bounded sequences. (Russian) **(80k:47035)**

Wynn, P. The calculus of finite differences over certain systems of numbers. **(80e:65013)**

Zakirov, F. K. (*with* Gaĭnullin, M. N.) On the theory of the oscillation of the solutions of the difference equation $\Delta[r(n)\Delta^{m-1}y(n)] = f(n, y(n), y(n+1), \cdots, y(n+m))$. I. (Russian) **(80a:39002)**

39A70 Difference operators [See also 47B39.]

Secondary classifications:

Il'muškin, G. M. Spectral functions of a regular symmetric difference operator. (Russian) **(80f:47029)**

Korobicyn, V. A. (*with* Sidonskiĭ, O. B.) The difference operator on a group over a matrix ring. (Russian) **(80d:47057)**

Kričever, I. M. Algebraic curves and nonlinear difference equations. (Russian) **(80k:58055)**

Sidonskiĭ, O. B. *See* **Korobicyn, V. A., (80d:47057)**

39A99 None of the above, but in this section

Secondary classifications:

Armstrong, Ernest S. An asymptotic property for a class of finite difference equations. **(80e:93093)**

39Bxx Functional equations [See also 30D05.]

39B05 General

Ger, Joanna On analytic solutions of the functional equation $\varphi(f(x)) = g(x, \varphi(x))$. (Polish summary) **80d:39003**

Secondary classifications:

Daróczy, Z. (*with* Járai, Antal) On the measurable solution of a functional equation arising in information theory. **(80i:39008)**

Eichhorn, Wolfgang ★Functional equations in economics. **(80e:90034)**

Járai, Antal *See* **Daróczy, Z., (80i:39008)**

Matsumoto, Masamichi Functional equations in emitting atmospheres. **(80a:85002)**

Snow, Donald R. Formulas for sums of powers of integers by functional equations. **(80a:10005)**

39B10 Equations containing iterates, equations of rank one

Angelov, V. G. (*with* Baĭnov, D. D.) Existence and uniqueness of the solution of nonlinear functional equations in the space L^p. (Russian. Kazakh summary) **80m:39003**

Baĭnov, D. D. *See* **Angelov, V. G., 80m:39003**

Bajraktarević, Mahmut Sur les solutions convexes d'une équation fonctionnelle. (Serbo-Croatian summary) **80b:39002**

Brown, Gavin (*with* Hewitt, Edwin) The functional equation $[f(\sin(x))]^2 + [f(\cos(x))]^2 = 1$. (Russian summary) **80m:39004**

Czechowski, Andrzej Regular solutions of the Schröder equation. (Polish. Russian and English summaries) **80h:39005**

Fenyő, I. The solution of a functional equation by Laplace transformation. **80i:39005**

Hewitt, Edwin *See* **Brown, Gavin, 80m:39004**

Jou, S. S. On the functional equation $f[x + yf(x)] = f(x)\, f(y)$. **80j:39007**

Moszner, Zenon (*with* Waśko, Maria) Sur les solutions d'une équation fonctionnelle. III. **80g:39004**

Reznick, Bruce When is the iterate of a formal power series odd? **80g:39005**

Rice, R. E. Iterative square roots of Čebyšev polynomials. **80m:39005**

Rudeanu, Sergiu On reproductive solutions of arbitrary equations. **80j:39008**

Ryff, John V. The functional equation $F(ax) + F(bx + a) = F(bx) + F(ax + b)$, entire and almost periodic solutions. **80f:39007**

Sablik, Maciej On iterates of multi-hat functions. (Polish summary) **80e:39002**

Valenti, Santi Recent results on the generalized Artin equation. (Italian) **80h:39006**

Waśko, Maria *See* **Moszner, Zenon, 80g:39004**

Secondary classifications:

Brydak, Dobiesław (*with* Choczewski, Bogden) Application of functional inequalities to determining one-parameter families of solutions of a functional equation. **(80b:39005)**

Choczewski, Bogden *See* **Brydak, Dobiesław, (80b:39005)**

Haruki, Hiroshi On a generalization of Hille's functional equation. **(80i:30040)**

Kuczma, Marek Nonnegative continuous solutions of a functional inequality. **(80m:39009)**

Liedl, R. Ein Transportproblem. **(80j:39013)**

Matkowski, J. Integrable solutions of a linear functional inequality. **(80b:39006)**

Reynaerts, Huguette The linear functional equation $\sum_{i=1}^{n} h_i \times \varphi \circ g_i = h$. **(80j:39014)**

Turdza, Erwin Comparison theorems for a functional inequality. **(80b:39007)**

39B20 Equations for one unknown function of one variable, rank greater than one

Benz, Walter On a conjecture of I. Fenyő. **80i:39006**

Diderrich, George T. Continued fractions and the fundamental equation of information. **80j:39009**

Fochi, Margherita (*with* Skof, Fulvia) Criteria of continuity for the solution of Cauchy's functional equation. (Italian) **80c:39001**

(*with* Skof, Fulvia) Some criteria for the continuity of additive functions. (Italian) **80m:39006**

Ger, Roman Functional equations with a restricted domain. (Italian summary) **80j:39010**

Grzęślewicz, Andrzej On the solution of the system of functional equations related to quadratic functionals. (Serbo-Croatian summary) **80i:39007**

Howroyd, T. (*with* Maxfield, J. E.) Functional equations with extrema. **80d:39004**

Járai, Antal On measurable solutions of functional equations. **80f:39008**

Kominek, Bożena (*with* Kominek, Zygfryd) On some classes connected with the continuity of additive and Q-convex functions. (Polish summary) **80h:39003**

Kominek, Zygfryd *See* **Kominek, Bożena, 80h:39003**

Lawrence, John (*with* Mess, Geoff; Zorzitto, Frank) Near derivations and information functions. **80d:39005**

Letac, Gérard Cauchy functional equation again. **80a:39005**

Maxfield, J. E. *See* **Howroyd, T., 80d:39004**

Mess, Geoff *See* **Lawrence, John; et al., 80d:39005**

Skof, Fulvia *See* **Fochi, Margherita, 80c:39001** *and* **Fochi, Margherita, 80m:39006**

Zorzitto, Frank *See* **Lawrence, John; et al., 80d:39005**

Secondary classifications:

Aczél, J. E. Picardus ab omni naevo liberatus (on the axiomatics of vector addition). **(80j:51017)**

(Buñsambati, Wirun) *See* **Dhombres, Jean, (80j:39001)**

Dhombres, Jean On some extensions of homomorphisms. **(80e:39003)**

★Some aspects of functional equations. **(80j:39001)**

Forti, Costanza Borelli (*with* Forti, Gian Luigi) Vector-valued solutions of a functional equation. (Italian summary) **(80h:39012)**

Forti, Gian Luigi *See* **Forti, Costanza Borelli, (80h:39012)**

Jou, S. S. On the functional equation $f[x + yf(x)] = f(x)\, f(y)$. **(80j:39007)**

Kirsch, Arnold Beziehungen zwischen der Additivität und der Homogenität von Vektorraum-Abbildungen. **(80b:15005)**

Paganoni, Luigi On uniqueness structures: some conditions and applications. (Italian summary) **(80h:39016)**

39B30 Equations for several unknown functions of one variable, systems

Czerwik, Stefan Solutions of a system of functional equations in some class functions. **80h:39007**

Daróczy, Z. (*with* Járai, Antal) On the measurable solution of a functional equation arising in information theory. **80i:39008**

Grzęślewicz, Andrzej Some remarks to additive functions. **80b:39004**

Járai, Antal *See* **Daróczy, Z., 80i:39008**

Kannappan, Pl. Addendum to my paper: "On Shannon's entropy and a functional equation of Abel" (Period. Math. Hungar. **8** (1977), no.1, 41–44). **80a:39006**

Mangolini, Marco (*with* Paganoni, Luigi) Regularity theorems for a class of functional equations. (Italian. English summary) **80h:39008**

Martić, Branislav On some functional equations. (Serbo-Croatian summary) **80d:39006**

Quelques équations fonctionnelles contenant plusieurs fonctions inconnues. (Serbo-Croatian summary) **80d:39007**

Nath, Prem On some functional equations connected with various entropies in information theory. **80j:39011**

Paganoni, Luigi *See* **Mangolini, Marco, 80h:39008**

Secondary classifications:

Mangolini, Marco Some properties of the solutions to the generalized Pexider equations. (Italian. English summary) **(80m:39008)**

Penney, R. C. (*with* Rukhin, Andrew L.) d'Alembert's functional equation on groups. **(80h:39013)**

Rukhin, Andrew L. *See* **Penney, R. C., (80h:39013)**

39B40 Equations for functions of several variables

Forti, Gian Luigi On the functional equation $f(L + x) = f(L) + f(x)$. (Italian summary) **80h:39009**

Regularity and representation theorems for a class of translation equation's solutions. (Italian summary) **80m:39007**

Janardan, K. G. A new functional equation analogous to Cauchy-Pexider functional equation and its application. **80f:39009**

Kannappan, Pl. (*with* Sathyabhama, V.) Generalization of sum representation functional equations. I. **80j:39012a**

(*with* Rathie, Pushpa N.) Generalized sum representation functional equations. II. Generalized directed divergence. **80j:39012b**

Liedl, R. Ein Transportproblem. **80j:39013**

(McKiernan, M. A.) *See* **Székelyhidi, László, 80h:39011**

Moszner, Zenon (*with* Waśko, Maria) L'équation de translation sur le produit simple des groupes avec zéro. **80i:39009**

Rathie, Pushpa N. *See* **Kannappan, Pl., 80j:39012b**

Sathyabhama, V. *See* **Kannappan, Pl., 80j:39012a**

Sharma, Bhu Dev (*with* Singh, Ishwar) On the entropy function of degree β. **80h:39010**

Singh, Ishwar *See* **Sharma, Bhu Dev, 80h:39010**

Šljusarčuk, V. E. Solution of linear functional equations in the space of functions bounded on $\mathbb{R}^n$. (Russian) **80d:39008**

Székelyhidi, László Remark on a paper of M. A. McKiernan: "On vanishing nth ordered differences and Hamel-bases" [Ann. Polon. Math. 19 (1967), 331–336; MR 36 #4183]. **80h:39011**

Vincze, E. Über die Einführung der komplexen Zahlen mittels Funktionalgleichungen. **80f:39010**

Waśko, Maria *See* **Moszner, Zenon, 80h:39009**

Secondary classifications:

Bellman, Richard E. Some functional equations arising in the calculus of variations. **(80j:49025)**

Bertoluzza, Carlo (*with* Boscaini, Angela) A system of functional equations connected to a generalization of the idea of independence in information theory. (Italian) **(80h:39015)**

Bierstone, Edward (*with* Milman, Pierre) Invariant solutions of analytic equations. **(80h:14020)**

Boscaini, Angela *See* **Bertoluzza, Carlo, (80h:39015)**

Hyb, Wojciech On some minimal transformations of compact spaces. **(80a:54013)**

Kamiński, A. (*with* Kannappan, Pl.; Mikusiński, J.) Distributional solutions in information theory. I. **(80e:94008)**

Kannappan, Pl. *See* **Kamiński, A.; et al., (80e:94008)**

Krapež, A. On solving a system of balanced functional equations on quasigroups. I. **(80a:39007)**

Mikusiński, J. *See* **Kamiński, A.; et al., (80e:94008)**

Milman, Pierre *See* **Bierstone, Edward, (80h:14020)**

Moszner, Zenon (*with* Waśko, Maria) Sur les solutions d'une équation fonctionnelle. III. **(80g:39004)**

Šestopalov, V. P. *See* **Vinogradov, S. S.; et al., (80g:33014)**

Stojaković, Zoran *See* **Ulan, Janez, (80a:39008)**

Taneja, Inder Jeet A joint characterization of Shannon's entropy and entropy of type β through a functional equation. **(80g:94035)**

On the information improvement due to 2 and N revisions. **(80k:94022)**

Tučkin, Ju. A. *See* **Vinogradov, S. S.; et al., (80g:33014)**

Tutte, William T. On a pair of functional equations of combinatorial interest. **(80h:05026)**

Ulan, Janez (*with* Stojaković, Zoran) On a system of functional equations on quasigroups. **(80a:39008)**

Vinogradov, S. S. (*with* Tučkin, Ju. A.; Šestopalov, V. P.) An effective solution to paired summator equations with the kernel in the form of adjoint Legendre functions. (Russian) **(80g:33014)**

Waśko, Maria *See* **Moszner, Zenon, (80g:39004)**

39B50 Functional equations on algebraic structures

Al-Salam, Nadhla A. (*with* Al-Salam, Waleed A.) On a functional equation. **80g:39006**

Al-Salam, Waleed A. *See* **Al-Salam, Nadhla A., 80g:39006**

Baker, John A. (*with* Lawrence, John; Zorzitto, Franco) The stability of the equation $f(x+y)=f(x)f(y)$. **80d:39009**

Dhombres, Jean On some extensions of homomorphisms. **80e:39003**

Ebanks, Bruce R. On some functional equations of Jessen, Karpf, and Thorup. **80h:39002**

Forti, Costanza Borelli (*with* Forti, Gian Luigi) Vector-valued solutions of a functional equation. (Italian summary) **80h:39012**

Forti, Gian Luigi *See* **Forti, Costanza Borelli, 80h:39012**

Krapež, A. On solving a system of balanced functional equations on quasigroups. I. **80a:39007**

Kuczma, Marek On some alternative functional equations. **80k:39003**

Lawrence, John *See* **Baker, John A.; et al., 80d:39009**

Penney, R. C. (*with* Rukhin, Andrew L.) d'Alembert's functional equation on groups. **80h:39013**

Piechowicz, L. (*with* Serafin, S.) Solution of the translation equation on some structures. **80g:39007**

Rätz, Jürg Quadratic functionals satisfying a subsidiary inequality. **80k:39004**

Reich, L. *See* **Schwaiger, Jens, 80i:39011**

Reynaerts, Hugnette The linear functional equation $\sum_{i=1}^{n} h_i \times \varphi \circ g_i = h$. **80j:39014**

Rukhin, Andrew L. *See* **Penney, R. C., 80h:39013**

Rzepecki, Bogdan On the functional equation $x(t)=f(t, x(t_0), x(t), x(h(t)))$ in a Banach space. **80i:39010**

Schwaiger, Jens (*with* Reich, L.) Über die Funktionalgleichung $N \circ T = T \circ M$ für formale Potenzreihen. **80i:39011**

Serafin, S. *See* **Piechowicz, L., 80g:39007**

Stojaković, Zoran *See* **Ulan, Janez, 80a:39008**

Tabor, J. Time scale transformation equation. **80e:39004**

Ulan, Janez (*with* Stojaković, Zoran) On a system of functional equations on quasigroups. **80a:39008**

Zorzitto, Franco *See* **Baker, John A.; et al., 80d:39009**

Secondary classifications:

Brown, Gavin (*with* Hewitt, Edwin) The functional equation $[f(\sin(x))]^2+[f(\cos(x))]^2=1$. (Russian summary) **(80m:39004)**

Bucher, W. Kontinuierliche Iterationen formal-biholomorpher Abbildungen. **(80j:22005)**

(Buñuambati, Wirun) *See* **Dhombres, Jean, (80j:39001)**

Chottin, Laurent Application des séries non commutatives aux problèmes de codage et d'énumération. **(80d:05028)**

Dhombres, Jean ★Some aspects of functional equations. **(80j:39001)**

Ger, Roman Functional equations with a restricted domain. (Italian summary) **(80j:39010)**

Hewitt, Edwin *See* **Brown, Gavin, (80m:39004)**

Lind, D. A. Split skew products, a related functional equation, and specification. **(80e:28023)**

Moszner, Zenon (*with* Waśko, Maria) L'équation de translation sur le produit simple des groupes avec zéro. **(80i:39009)**

Pavlović, Velimir The Moufang functional equation $B_1(x, B_2(y, B_3(x, z))) = B_4(B_5(B_6(x, y), x), z)$ on GD-groupoids. **(80h:20112)**

Waśko, Maria *See* **Moszner, Zenon, (80i:39009)**

39B60 Matrix functional equations

Kareńska, Z. On some two functional equations in the theory of geometric objects. **80j:39015**

Mahmudov, A. P. (*with* Ragimov, M. B.) On a study of a functional system. (Russian) **80e:39005**

Ragimov, M. B. *See* **Mahmudov, A. P., 80e:39005**

Ramakrishnan, Alladi On the matrix functional equation $\alpha(\lambda z)=\beta(z)\cdot\alpha(z)$. **80h:39014**

Secondary classifications:

Czechowski, Andrzej Regular solutions of the Schröder equation. (Polish. Russian and English summaries) **(80h:39005)**

Reich, L. *See* **Schwaiger, Jens, (80i:39011)**

Schwaiger, Jens (*with* Reich, L.) Über die Funktionalgleichung $N \circ T = T \circ M$ für formale Potenzreihen. **(80i:39011)**

39B70 Functional equations on abstract spaces or structures

Bertoluzza, Carlo (*with* Boscaini, Angela) A system of functional equations connected to a generalization of the idea of independence in information theory. (Italian) **80h:39015**

Boscaini, Angela *See* **Bertoluzza, Carlo, 80h:39015**

Buche, A. B. The generalized Cauchy equation for self-adjoint operators on a Hilbert space. **80e:39006**

Duggal, B. P. Functional equations and linear transformations. IV. Interpolation. **80a:39009**

Howard, M. L. Roots of doubly-infinite increasing sequences. **80c:39002**

Kečkić, Jovan D. On some classes of linear equations. **80a:39010**

Kwapisz, Marian (*with* Turo, Jan) On some class of integral-functional equations in locally convex spaces. **80k:39005**

(*with* Turo, Jan) On the existence and uniqueness of integrable solutions of functional equations in a Banach space. **80i:39012**

Mangolini, Marco Some properties of the solutions to the generalized Pexider equations. (Italian. English summary) **80m:39008**

Paganoni, Luigi On uniqueness structures: some conditions and applications. (Italian summary) **80h:39016**

Sander, Wolfgang Verallgemeinerte Cauchy-Funktionalgleichungen. **80h:39017**

Sljusarčuk, V. E. Bounded solutions of nonlinear almost periodic discrete systems. (Russian. English summary) **80i:39013**

Tagi-Zade, A. T. The functional equation $Y(f(x))=e^{Q_0(x)}Y(x)$. (Russian) **80e:39007**

Turo, Jan *See* **Kwapisz, Marian, 80i:39012** *and* **Kwapisz, Marian, 80k:39005**

Secondary classifications:

Barnhardt, J. Distributive groupoids and biassociativity. **(80i:22009)**

Forti, Gian Luigi Regularity and representation theorems for a class of translation equation's solutions. (Italian summary) **(80m:39007)**

Kirsch, Arnold Beziehungen zwischen der Additivität und der Homogenität von Vektorraum-Abbildungen. **(80b:15005)**

Moszner, Zenon (*with* Waśko, Maria) Sur les solutions d'une équation fonctionnelle. III. **(80g:39004)**

Rabier, Patrick Étude d'un type d'équation fonctionnelle non linéaire. (English summary) **(80j:47085)**

Waśko, Maria *See* **Moszner, Zenon, (80g:39004)**

39B99 None of the above, but in this section

Secondary classifications:

Mortell, M. P. (*with* Seymour, B. R.) Nonlinear forced oscillations in a closed tube: continuous solutions of a functional equation. **(80k:76035)**

Seymour, B. R. *See* **Mortell, M. P., (80k:76035)**

39C05 Functional inequalities [See also 26Dxx.]

Brydak, Dobiesław (*with* Choczewski, Bogden) Application of functional inequalities to determining one-parameter families of solutions of a functional equation. **80b:39005**

On functional inequalities in a single variable. **80g:39008**

Choczewski, Bogden *See* **Brydak, Dobiesław, 80b:39005**

Kuczma, Marek Nonnegative continuous solutions of a functional inequality. **80m:39009**

Matkowski, J. Integrable solutions of a linear functional inequality. **80b:39006**

Pachpatte, B. G. On some new discrete inequalities and their applications to a class of sum-difference equations. **80e:39008**

Sander, Wolfgang Regularitätseigenschaften von Funktionalungleichungen. (English and Serbo-Croatian summaries) **80h:39018**

Turdza, Erwin Comparison theorems for a functional inequality. **80b:39007**

The solutions of an inequality for the nth iterate of a function. **80d:39010**

Secondary classifications:

Bondge, B. K. (*with* Pachpatte, B. G.) On Wendroff type integral inequalities in n independent variables. **(80j:26014)**

Gutowski, Roman *See* **Martinjuk, A. A., (80k:34070)**

Járai, Antal On measurable solutions of functional equations. (80f:39008)
Kamont, Zdzisław On inequalities between solutions of first order partial differential-functional equations. (80f:35171)
Martinjuk, A. A. (*with* Gutowski, Roman) ★Интегральные неравенства и устойчивость движения. (Russian) [Integral inequalities and stability of motion] (80k:34070)
Pachpatte, B. G. A note on some new nth order discrete inequalities. (80h:39004)
See also Bondge, B. K., (80j:26014)

40-XX SEQUENCES, SERIES, SUMMABILITY

40-01 Elementary exposition, textbooks

Vorobiov, M. M. ★Теория рядов. (Russian) [Theory of series] 80l:40001

40-02 Advanced exposition (research surveys, monographs, etc.)

40-03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Barbeau, E. J. Euler subdues a very obstreperous series. (80l:01007)
(Euler, Leonhard) *See* Barbeau, E. J., (80l:01007)
(Gauss, Carl Friedrich) *See* Kurdjumova, A. I., (80a:01020)
Kurdjumova, A. I. The Bolzano-Cauchy criterion for convergence in an 1812 work of Gauss. (Russian) (80a:01020)

40-04 Explicit machine computation and programs (not the theory of computation or programming)

40-06 Proceedings, conferences, etc.

40Axx Convergence and divergence of infinite limiting processes

40A05 Convergence and divergence of series and sequences

Baillie, Robert Sums of reciprocals of integers missing a given digit. 80g:40002
Barbieri, Francesco (*with* Facchinetti, Gisella) Summation matrices generated by lacunary harmonic series. (Italian) 80g:40001
Facchinetti, Gisella *See* Barbieri, Francesco, 80g:40001
Higgins, Rada More in the theory of sequences. 80m:40001
Miller, Harry I. Some results on rates of convergence of sequences. (Serbo-Croatian summary) 80a:40001
Muratov, L. M. Improvement of the convergence of series. (Russian) 80b:40001
Nurcombe, J. R. A sequence of convergence tests. 80h:40001
Pakes, Anthony G. The characterization of series amenable to ratio tests. 80m:40002
Trojan, Jerzy Index of convergence. (Polish. Russian and English summaries) 80m:40003
Vrânceanu, G. G. Some remarks on Copson's generalization of monotonic sequences. 80c:40001
Wadhwa, A. D. Some convergent subseries of the harmonic series. 80a:40002

Secondary classifications:

Barbeau, E. J. Euler subdues a very obstreperous series. (80l:01007)
Copson, E. T. Two series inequalities. (80f:26012)
(Euler, Leonhard) *See* Barbeau, E. J., (80l:01007)
Kaljužnyi, A. A. A generalization of the Dirichlet test. (Russian) (80m:40004)
Kinchi, E. (*with* Richter-Dyn, Nira) Convergence properties of sequences of functions with application to restricted derivative approximation. (80a:41015)
Ney, Andrei Nouvelle étude sur l'accélération de la convergence des séries numériques. (80d:65012)
Problèmes de convergence regardant les séries en espaces topologiques. (80j:40011)
Pleasants, P. A. B. Addendum: "Rearrangements that preserve convergence" (J. London Math. Soc. (2) 15 (1977), no. 1, 134–142). (80c:05006)
Richter-Dyn, Nira *See* Kinchi, E., (80a:41015)
Smith, A. C. A one-parameter method for accelerating the convergence of sequences and series. (80b:65005)

40A10 Convergence and divergence of integrals

40A15 Convergence and divergence of continued fractions [See also 30B70.]

Murphy, J. A. (*with* O'Donohoe, M. R.) A two-variable generalization of the Stieltjes-type continued fraction. 80k:40001
O'Donohoe, M. R. *See* Murphy, J. A., 80k:40001

Secondary classifications:

Davison, J. L. An algorithm for the continued fraction of $e^{1/m}$. (80j:10012)
Waadeland, Haakon General T-fractions corresponding to functions satisfying certain boundedness conditions. (80k:30010)
Limit-periodic general T-fractions and holomorphic functions. (80k:30011)

40A20 Convergence and divergence of infinite products

Secondary classifications:

Carlitz, Leonard Some product-sum identities. (80a:05019)

40A25 Approximation to limiting values (summation of series, etc.) {For the Euler-Maclaurin summation formula, see 65B15.}

Johnsonbaugh, Richard Summing an alternating series. 80g:40003
Smith, A. C. Asymptotic estimates of sums of series using difference equations. 80d:40001

40A30 Convergence and divergence of series and sequences of functions

Tandori, Károly Bemerkung zu einem Satz von G. Alexits und A. Sharma. 80k:40002

40A99 None of the above, but in this section

Gonthneac, M. (*with* Sîrbu, Elena) Some properties of the basic derivative operators. (Romanian. English summary) 80a:40003
Sîrbu, Elena *See* Gonthneac, M., 80a:40003

40B05 Multiple sequences and series (should also be assigned at least one other classification number in this section)

Kaljužnyi, A. A. A generalization of the Dirichlet test. (Russian) 80m:40004

40Cxx General summability methods

40C05 Matrix methods

Dhanapalan, T. R. Matrix transformations between certain spaces of sequences in a non-Archimedean Banach algebra. 80h:40002
Fridy, J. A. Submatrices of summability matrices. 80a:40004
Keagy, Thomas A. Summability of subsequences and rearrangements of sequences. 80a:40005
Koskela, Mauri A characterization of non-negative matrix operators on l^p to l^q with $\infty > p > q > 1$. 80c:40001
Kuttner, Brian (*with* Parameswaran, Mangalam R.) On the generalized Hausdorff and some related matrices. 80g:40004
Mursaleen On infinite matrices and invariant means. 80j:40001
Parameswaran, Mangalam R. *See* Kuttner, Brian, 80g:40004

Secondary classifications:

Barbieri, Francesco (*with* Facchinetti, Gisella) Summation matrices generated by lacunary harmonic series. (Italian) (80g:40001)
Facchinetti, Gisella *See* Barbieri, Francesco, (80g:40001)
Lee, Peng Yee Linear and nonlinear transformations between sequence spaces. (80l:40005)
Mittal, M. L. *See* Prasad, Gunraj, (80a:40007)
Prasad, Gunraj (*with* Mittal, M. L.) On strong matrix summability. (80a:40007)
Tietz, Hubert Charakterisierungen für Hausdorff-Matrizen. (80f:40004)

40C10 Integral methods

40C15 Function-theoretic methods (including power series methods and semicontinuous methods)

Faulstich, Karin Summierbarkeit von Potenzreihen durch Riesz-Verfahren mit komplexen Erzeugendenfolgen. 80j:40002

40C99 None of the above, but in this section

Muslelak, Julian Approximation by singular modulars. 80j:40003

Secondary classifications:

Jakimovski, A. (*with* Russell, D. C.) High indices theorems for Riesz and Abel typical means. (80c:40003)
Natarajan, P. N. Multiplication of series with terms in a non-Archimedean field. (80c:12024)
Russell, D. C. *See* Jakimovski, A., (80c:40003)
Tanović-Miller, Naza On strong summability. (Serbo-Croatian summary) (80k:40004)

40Dxx Direct theorems on summability

40D05 General theorems

Hoischen, Lothar (*with* Mogk, Eberhard) Bestimmung von Konvergenzfaktoren aus asymptotischen Approximationseigenschaften Dirichletscher Reihen. 80b:40002
Mogk, Eberhard *See* Hoischen, Lothar, 80b:40002
Peterson, G. M. A sequence algebra associated with distributions. 80b:40003

40D09 Structure of summability fields

Antoni, Józef On characterization of summability fields by integral. (Russian summary) 80h:40003
Kuan, Shèng Yû On the inset of a convergence domain. 80c:40002

Secondary classifications:

Censor, Yair General conservative FK-spaces and an extended notion of conullity. **(80c:46013)**
Freedman, Allen R. (*with* Sember, John J.; Raphael, Marc) Some Cesàro-type summability spaces. **(80c:40007)**
Raphael, Marc *See* **Freedman, Allen R.; et al., (80c:40007)**
Sember, John J. *See* **Freedman, Allen R.; et al., (80c:40007)**

40D10 Tauberian constants and oscillation limits

40D15 Convergence factors and summability factors

Bosanquet, L. S. (*with* Das, G.) Absolute summability factors for Nörlund means. **80j:40004**
Das, G. *See* **Bosanquet, L. S., 80j:40004**

Secondary classifications:

Shawyer, Bruce L. R. On the strong-Riesz mean-value theorem. **(80d:40007)**

40D20 Summability and bounded fields of methods

40D25 Inclusion and equivalence theorems

Ahmad, Z. U. (*with* Parashar, Vinod K.) On a relation between Nörlund summability and Lebesgue summability. **80f:40001**
Chandra, Prem A note on an inclusion theorem. **80d:40002**
Jakimovski, A. (*with* Russell, D. C.) High indices theorems for Riesz and Abel typical means. **80c:40003**
Kuttner, Brian (*with* Parameswaran, Mangalam R.) A product theorem and a Tauberian theorem for Euler methods. **80d:40003**
Parameswaran, Mangalam R. *See* **Kuttner, Brian, 80d:40003**
Parashar, Vinod K. On (N, p_n) and $(K, 1, \alpha)$ summability methods. **80j:40005**
See also **Ahmad, Z. U., 80f:40001**
Russell, D. C. *See* **Jakimovski, A., 80c:40003**
Somasundaram, D. Inclusion theorems for the sequence spaces of Allen. **80f:40002**
Inclusion theorems on matrix transformations of some sequence spaces over non-Archimedian fields. III. **80d:40004**
Wang, Chung Shin On Nörlund sequence spaces. **80g:40005**

Secondary classifications:

Choudhary, B. *See* **Kumar, Ashok, (80k:40005)**
Ganguly, Ashok *See* **Jain, R. K., (80c:40004)**
Jain, R. K. (*with* Ganguly, Ashok) On the inclusion relation between strong (J, p_n) and strong $(\overline{N}, p_n)$ summability methods. **(80c:40004)**
Kumar, Ashok (*with* Choudhary, B.) Strong functional Nörlund summability. **(80k:40005)**
Kuttner, Brian (*with* Maddox, I. J.) Bounded sequences and Nörlund means. **(80g:40011)**
Maddox, I. J. On strong almost convergence. **(80b:40004)**
See also **Kuttner, Brian, (80g:40011)**
Mishra, Babban Prasad (*with* Srivastava, Anand Prakash) Strong and absolute summabilities of functions based on (D, α) summability methods. **(80f:40003)**
Srivastava, Anand Prakash *See* **Mishra, Babban Prasad, (80f:40003)**

40D99 None of the above, but in this section

40Exx Inversion theorems

40E05 Tauberian theorems, general

Alpár, L. Tauberian theorems for power series of several variables. I. **80j:40006**
Balkema, A. A. (*with* Geluk, J. L.; de Haan, Laurens) An extension of Karamata's Tauberian theorem and its connection with complementary convex functions. **80m:40005**
Bingham, N. H. (*with* Teugels, J. L.) Tauberian theorems and regular variation. **80g:40006**
Diamond, Harold G. (*with* Essén, Matts) One-sided Tauberian theorems for kernels which change sign. **80a:40006**
Essén, Matts *See* **Diamond, Harold G., 80a:40006**
Fridy, J. A. Tauberian theorems via block dominated matrices. **80g:40007**
Galić, Mihailo On an O-inverse theorem. (Serbo-Croatian summary) **80j:40007**
Geluk, J. L. An Abel-Tauber theorem on convolutions with the Möbius function. **80j:40008**
See also **Balkema, A. A.; et al., 80m:40005**
de Haan, Laurens *See* **Balkema, A. A.; et al., 80m:40005**
Kanahara, Yuji Tauberian theorems of exponential type. **80g:40008**
Lyttkens, S. A Tauberian theorem with rapidly decreasing remainder. **80j:40009**
Parameswaran, Mangalam R. A general Tauberian theorem. (Serbo-Croatian summary) **80i:40002**
Rempulska, Lucyna Theorems of Tauber type for some methods of summability. **80k:40003**
Teugels, J. L. *See* **Bingham, N. H., 80g:40006**

Secondary classifications:

Fré, P. On the mass-group associated to hadronic mass-spectrum. The role and the problems of SL(2, R) and SL(2, Z). **(80i:81058)**

Kuttner, Brian (*with* Parameswaran, Mangalam R.) A product theorem and a Tauberian theorem for Euler methods. **(80d:40003)**
Parameswaran, Mangalam R. *See* **Kuttner, Brian, (80d:40003)**

40E10 Growth estimates

40E15 Lacunary inversion theorems

40E20 Tauberian constants

Secondary classifications:

Gretton, Harry (*with* Jukes, Ken) Tauberian constants connected with the prime number theorem. II. Computational aspects. **(80a:10064)**
Jukes, Ken *See* **Gretton, Harry, (80a:10064)**

40E99 None of the above, but in this section

40F05 Absolute and strong summability

Balser, W. (*with* Jurkat, W. B.; Peyerimhoff, A.) On linear functionals and summability factors for strong summability. **80e:40002**
Choudhary, B. *See* **Kumar, Ashok, 80i:40004**
Das, G. (*with* Mohapatra, R. N.) Absolute summability factors involving Nörlund means. **80i:40003**
Ganguly, Ashok *See* **Jain, R. K., 80c:40004**
Jadiya, Banshi Lal Absolute summability of Laguerre series. (Hindi. English summary) **80g:40009**
Jain, R. K. (*with* Ganguly, Ashok) On the inclusion relation between strong (J, p_n) and strong $(\overline{N}, p_n)$ summability methods. **80c:40004**
Jurkat, W. B. *See* **Balser, W.; et al., 80e:40002**
Kumar, Ashok (*with* Choudhary, B.) On convergence fields of strong functional Nörlund methods. **80i:40004**
Maddox, I. J. On strong almost convergence. **80b:40004**
Mishra, Babban Prasad (*with* Srivastava, Anand Prakash) Strong and absolute summabilities of functions based on (D, α) summability methods. **80f:40003**
Mittal, M. L. *See* **Prasad, Gunraj, 80a:40007**
Mohapatra, R. N. *See* **Das, G., 80i:40003**
Peyerimhoff, A. *See* **Balser, W.; et al., 80e:40002**
Prasad, Gunraj (*with* Mittal, M. L.) On strong matrix summability. **80a:40007**
Srivastava, Anand Prakash *See* **Mishra, Babban Prasad, 80f:40003**
Tanović-Miller, Naza On the inclusion relations for absolute summability. (Serbo-Croatian summary) **80c:40005**
On strong summability. (Serbo-Croatian summary) **80k:40004**

Secondary classifications:

Beohar, B. K. (*with* Sharma, Sushil) On the absolute Cesàro summability of ultraspherical series. **(80k:42027)**
Choudhary, B. *See* **Kumar, Ashok, (80k:40005)**
Kumar, Ashok (*with* Choudhary, B.) Strong functional Nörlund summability. **(80k:40005)**
Sharma, Sushil *See* **Beohar, B. K., (80k:42027)**

40Gxx Special methods of summability

40G05 Cesàro, Euler, Nörlund and Hausdorff methods

Barve, S. *See* **Chandra, Prem, 80g:40010**
Boos, Johann Konvexität der (C, α)-Verfahren. **80c:40006**
Chandra, Prem (*with* Barve, S.) Absolute matrix summability factors of infinite series and their application to Fourier series. **80g:40010**
Choudhary, B. *See* **Kumar, Ashok, 80k:40005**
Dawson, David F. Summability factors for Cesàro methods. **80d:40005**
Kumar, Ashok (*with* Choudhary, B.) Strong functional Nörlund summability. **80k:40005**
Kuttner, Brian (*with* Maddox, I. J.) Bounded sequences and Nörlund means. **80g:40011**
Maddox, I. J. *See* **Kuttner, Brian, 80g:40011**
Mishra, K. K. (*with* Seervani, D. L.) On absolute Nörlund summability of Laplace series. **80j:40010**
Seervani, D. L. *See* **Mishra, K. K., 80j:40010**
Thorpe, Brian An extension of Cauchy's criterion to Nörlund summability. **80d:40006**
Tietz, Hubert Charakterisierungen für Hausdorff-Matrizen. **80f:40004**

Secondary classifications:

Ahmad, Z. U. (*with* Parashar, Vinod K.) On a relation between Nörlund summability and Lebesgue summability. **(80f:40001)**
Das, G. (*with* Mohapatra, R. N.) Absolute summability factors involving Nörlund means. **(80i:40003)**
Hotta, G. C. On absolute Nörlund summability of a series related to the conjugate series of a Fourier series. **(80j:42018)**
Lal, Shiva Narain (*with* Ram, R. D.) On the localization of the summability $|(R, \lambda_n, 1)(C, r)|$ of the rth derived series of a Fourier series. **(80j:42019)**
Luh, Wolfgang (*with* Trautner, R.) On the Hausdorff-overconvergence of power series. **(80c:30004)**
Mohapatra, R. N. *See* **Das, G., (80i:40003)**
Parashar, Vinod K. *See* **Ahmad, Z. U., (80f:40001)**
Prasad, Rajendra On the uniform Nörlund summability of Legendre series. **(80m:42011)**
Ram, R. D. *See* **Lal, Shiva Narain, (80j:42019)**
Tanović-Miller, Naza On strong summability. (Serbo-Croatian summary) **(80k:40004)**

Trautner, R. *See* **Lak, Wolfgang.** **(80c:30004)**
Yadav, Sarjoo Prasad On $|C,1|$-summability of ultraspherical series. **(80k:42028)**

40G10 Abel, Borel and power series methods

Krishnan, V. K. Gap Tauberian theorem for logarithmic summability (L). **80g:40012**

Secondary classifications:

Eckmann, J.-P. (*with* Epstein, H.) Borel summability of the mass and the S-matrix in φ^4 models. **(80k:81150)**
Epstein, H. *See* **Eckmann, J.-P.,** **(80k:81150)**

40G99 None of the above, but in this section

Aljančić, S. Generalized Cesàro numbers. **80f:40005**
Liu, Matthew (*with* Rhoades, B. E.) Some properties of the Chebyshev method. **80f:40006**
Mishra, Babban Prasad (*with* Singh, Dinesh) On $A(R, \lambda_n, k)$ summability methods. **80h:40004**
Parashar, Vinod K. A note on total regularity for (R, λ_n, p) summability methods. **80h:40005**
Plasky, Mark A. Averaging an alternating series. **80b:40005**
Rhoades, B. E. *See* **Liu, Matthew,** **80f:40006**
Segal, S. L. A second note on Ingham's summation method. **80g:40013**
Shawyer, Bruce L. R. On the strong-Riesz mean-value theorem. **80d:40007**
Singh, Dinesh *See* **Mishra, Babban Prasad,** **80h:40004**
Singh, Niranjan A generalization of a theorem of Tatchell. **80h:40006**

Secondary classifications:

Faulstich, Karin Summierbarkeit von Potenzreihen durch Riesz-Verfahren mit komplexen Erzeugendenfolgen. **(80j:40002)**
Ganguly, Ashok *See* **Jain, R. K.,** **(80c:40004)**
Geluk, J. L. An Abel-Tauber theorem on convolutions with the Möbius function. **(80j:40008)**
Jain, R. K. (*with* Ganguly, Ashok) On the inclusion relation between strong (J, p_n) and strong $(\bar{N}, p_n)$ summability methods. **(80c:40004)**
Ziza, O. A. Application of summability methods of the class (φ, λ) to orthogonal series. (Russian) **(80d:42013)**

40H05 Functional analytic methods in summability

Freedman, Allen R. (*with* Sember, John J.; Raphael, Marc) Some Cesàro-type summability spaces. **80c:40007**
Lazić, Milivoje G. A generalization of the notions of regular and perfect convergence method. **80m:40006**
Lee, Peng Yee Linear and nonlinear transformations between sequence spaces. **80i:40005**
Raphael, Marc *See* **Freedman, Allen R.; et al.,** **80c:40007**
Sember, John J. *See* **Freedman, Allen R.; et al.,** **80c:40007**

Secondary classifications:

DeVos, Robert Category of sequences of zeros and ones in some FK spaces. **(80c:46014)**
Goes, Günther Multiplier representations of sequence spaces with applications to Lipschitz spaces and spaces of functions of generalized bounded variation. **(80a:42010)**
Johnson, Peter D., Jr. (*with* Mohapatra, R. N.) Sectional convergence in spaces obtained as inverse images of sequence spaces under matrix transformations. **(80k:46016)**
(*with* Mohapatra, R. N.) Density of finitely nonzero sequences in some sequence spaces. **(80k:46017)**
Lee, Peng Yee Summability factors of strongly summable sequences. **(80a:46008)**
Sectionally modulared spaces and strong summability. **(80a:46007)**
Mohapatra, R. N. *See* **Johnson, Peter D., Jr.,** **(80k:46016)** *and* **Johnson, Peter D., Jr.,** **(80k:46017)**
Wang, Chung Shin On Nörlund sequence spaces. **(80g:40005)**

40J05 Summability in abstract structures [See also 43A55, 46A35, 46B15.]

Klis, Czesław On summability in convergence groups. **80m:40007**
Natarajan, P. N. The Steinhaus theorem for Toeplitz matrices in non-Archimedean fields. **80f:40007**
Ney, Andrei Problèmes de convergence regardant les séries en espaces topologiques. **80j:40011**

Secondary classifications:

Dhanapalan, T. R. Matrix transformations between certain spaces of sequences in a non-Archimedean Banach algebra. **(80h:40002)**
Nanda, Sudarsan Matrix transformations in nonarchimedean spaces. **(80g:46064)**
Orsejjan, R. I. Unconditional summability in linear spaces. (Russian) **(80j:46012)**

41–XX APPROXIMATIONS AND EXPANSIONS [For all approximation theory in the complex domain, see 30E05 and 30E10; for all trigonometric approximation and interpolation, see 42A10 and 42A15; for numerical approximation, see 65Dxx.]

Pottinger, Peter On the approximation of functions and their derivatives by Hermite interpolation. **80b:41003**
Schempp, Walter Approximation und Transformationsmethoden. (English summary) **80b:41001**
Zinger, M. Ja. Formulation of the problem of V-approximation (a new reading of P. L. Čebyšev's works on questions of the uniform approximation of functions). (Russian) **80b:41002**

41–01 Elementary exposition, textbooks

(Anselone, Philip M.) *See* **Krabs, Werner,** **80j:41003**
Collatz, Lothar (*with* Krabs, Werner) ★Теория приближений. (Russian) [Approximation theory] **80j:41002**
(Golubov, B. I.) *See* **Collatz, Lothar; et al.,** **80j:41002**
(Guenther, Ronald B.) *See* **Krabs, Werner,** **80j:41003**
Holland, A. S. B. (*with* Sahney, Badri N.) ★The general problem of approximation and spline functions. **80j:41001**
Krabs, Werner ★Optimization and approximation. **80j:41003**
See also **Collatz, Lothar,** **80j:41002**
Sahney, Badri N. *See* **Holland, A. S. B.,** **80j:41001**

41–02 Advanced exposition (research surveys, monographs, etc.)

Rivlin, T. J. Some aspects of optimal recovery. **80i:41001**
A survey of recent results on optimal recovery. **80i:41002**
Sendov, Blagovest ★Хаусдорфовые приближения. (Russian) [Hausdorff approximations] **80j:41004**

Secondary classifications:

de Boor, Carl The approximation of functions and linear functionals: best vs. good approximation. **(80d:65028)**

41–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Boas, Ralph P. Extremal problems for polynomials. **(80d:26003)**

41–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

Shen-Orr, Chaim D. *See* **Ur, Hanoch,** **(80j:65010)**
Ur, Hanoch (*with* Shen-Orr, Chaim D.) Function evaluation by incremental computation, with applications. **(80j:65010)**

41–06 Proceedings, conferences, etc.

(Ciesielski, Zbigniew) *See* **Approximation theory,** **80i:41003**
(Dzjadik, V. K.) *See* **Studies in the theory of approximation of functions and their applications,** **80j:41005**
(Prolla, João B.) *See* **Approximation theory and functional analysis,** **80i:41004**
(Sahney, Badri N.) *See* **Polynomial and spline approximation,** **80f:41001**
(Wuytack, L.) *See* **Padé approximation and its applications,** **80m:41001**
Antwerp *See* **Padé approximation and its applications,** **80m:41001**
Approximation of functions *See* **Studies in the theory of approximation of functions and their applications,** **80j:41005**
Approximation theory ★Approximation theory. **80i:41003**
Approximation theory and functional analysis ★Approximation theory and functional analysis. **80i:41004**
Calgary, Alta. *See* **Polynomial and spline approximation,** **80f:41001**
Campinas *See* **Approximation theory and functional analysis,** **80i:41004**
Conference:
Padé Approximation and its Applications *See* **Padé approximation and its applications,** **80m:41001**
Functional analysis *See* **Approximation theory and functional analysis,** **80i:41004**
NATO Advanced Study Institute:
Polynomial and Spline Approximation *See* **Polynomial and spline approximation,** **80f:41001**
Padé approximation and its applications ★Padé approximation and its applications. **80m:41001**
Polynomial and spline approximation ★Polynomial and spline approximation. Theory and applications. **80f:41001**
Spline approximation *See* **Polynomial and spline approximation,** **80f:41001**
Studies in the theory of approximation of functions and their applications
★Исследования по теории приближения функций и их приложения. (Russian) [Studies in the theory of approximation of functions and their applications] **80j:41005**
Symposium:
Approximation Theory *See* **Approximation theory and functional analysis,** **80i:41004**
Warsaw *See* **Approximation theory,** **80i:41003**

Secondary classifications:

(Bilí, V. Ľ.) *See* Metric questions of the theory of functions and mappings, (80j:30003)
(Dzjadik, V. K.) *See* Theory of functions and its applications, (80k:30001)
(Mamedov, R. G.) *See* Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)
(Mitropol'skiĭ, Ju. O.) *See* Theory of functions and its applications, (80k:30001)
(Schempp, Walter) *See* Multivariate approximation theory, (80k:65006)
(Suvorov, G. D.) *See* Metric questions of the theory of functions and mappings, (80j:30003)
(Zeller, Karl) *See* Multivariate approximation theory, (80k:65006)
Approximation theory *See* Multivariate approximation theory, (80k:65006)
Conference:
Multivariate Approximation Theory *See* Multivariate approximation theory, (80k:65006)
Differential equations *See* Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)
Mappings *See* Metric questions of the theory of functions and mappings, (80j:30003)
Metric questions of the theory of functions and mappings ★Метрические вопросы теории функций и отображений. Вып. VI. (Russian) [Metric questions of the theory of functions and mappings. No. VI] (80j:30003)
Multivariate approximation theory ★Multivariate approximation theory. (80k:65006)
Oberwolfach *See* Multivariate approximation theory, (80k:65006)
Studies in some questions of the constructive theory of functions and differential equations ★Исследования по некоторым вопросам конструктивной теории функций и дифференциальных уравнений. (Russian) [Studies in some questions of the constructive theory of functions and differential equations] (80d:00021)
Theory of functions *See* Studies in some questions of the constructive theory of functions and differential equations, (80d:00021) *and* Metric questions of the theory of functions and mappings, (80j:30003)
Theory of functions and its applications ★Теории функций и ее приложения. (Russian) [The theory of functions and its applications] (80k:30001)

41A05 Interpolation [See also 42A15 and 65D05.]

Anderson, Ned A note on a generalized interpolation problem. **80a:41001**
Berndtsson, Bo A note on Pavlov-Korevaar-Dixon interpolation. **80g:41001**
de Boor, Carl (*with* Pinkus, Allan) Proof of the conjectures of Bernstein and Erdős concerning the optimal nodes for polynomial interpolation. **80d:41003**
Claessens, Guido Bigradients, Hankel determinants and the Newton-Padé table. **80i:41005**
Delvos, F.-J. (*with* Posdorf, H.) A representation formula for reduced Hermite interpolation. **80g:41002**
Erdős, Paul (*with* Szabados, J.) On the integral of the Lebesgue function of interpolation. **80a:41002**
Hall, Charles Spline blended approximation of multivariate functions. **80j:41006**
Haussmann, Werner (*with* Knoop, H.-B.) On two-dimensional interpolation. **80j:41007**
Differentiable Tchebycheff subspaces and Hermite interpolation. **80g:41003**
Kilgore, Theodore A. A characterization of the Lagrange interpolating projection with minimal Tchebycheff norm. **80d:41002**
Knoop, H.-B. *See* **Haussmann, Werner, 80j:41007**
Kumar, V. Some extended Hermite-Fejér interpolation processes and their convergence. **80j:41008**
Kuś, Stanisław On the connection between approximation in the space $L^2(-i\infty, i\infty)$ and interpolation. **80g:41004**
Lorentz, G. G. (*with* Riemenschneider, S. D.) Probabilistic approach to Schoenberg's problem in Birkhoff interpolation. **80f:41002**
Lyche, Tom A Newton form for trigonometric Hermite interpolation. **80d:41004**
Menke, Klaus Über die Verteilung der Curtiss-Maximalpunkte bei analytischen Jordankurven. **80c:41001**
Neuman, E. Convex interpolating splines of odd degree. **80d:41001**
Passow, Eli Hermite-Birkhoff interpolation: a class of nonpoised matrices. **80a:41003**
Pence, Dennis D. Hermite-Birkhoff interpolation and monotone approximation by splines. **80g:41005**
Pinkus, Allan *See* **de Boor, Carl, 80d:41003**
Popoviciu, Elena Sur les fonctionnelles simples par rapport à un ensemble interpolatoire. **80d:41005**
Sur la convexité simultanée par rapport aux plusieurs ensembles interpolatoires. **80i:41006**
Posdorf, H. *See* **Delvos, F.-J., 80g:41002**
Prasad, Jagdish On the uniform convergence of interpolatory polynomials. **80d:41006**
A note on nonexistence of interpolatory polynomials for (0, 2)-interpolation. **80g:41006**
(*with* Varma, A. K.) Lacunary interpolation by quintic splines. **80k:41001**
Riemenschneider, S. D. *See* **Lorentz, G. G., 80f:41002**
Saxena, R. B. (*with* Srivastava, K. B.) On interpolation operators. I. A proof of Jackson's theorem for differentiable functions. **80f:41003**
Scheffold, Egon (*with* Schlosser, Karl-Heinz) Spline-Funktionen mehrerer Veränderlicher. (English summary) **80i:41007**
Schlosser, Karl-Heinz *See* **Scheffold, Egon, 80i:41007**
(Sledge, Frank) *See* **Hall, Charles, 80j:41006**
Srivastava, K. B. *See* **Saxena, R. B., 80f:41003**
Szabados, J. *See* **Erdős, Paul, 80a:41002**
Thomirov, N. B. Approximation of continuous functions by interpolation polynomials. (Russian) **80m:41002**
Varma, A. K. *See* **Prasad, Jagdish, 80k:41001**
Vértesi, P. Convergent interpolatory processes for arbitrary systems of nodes. **80g:41007**

Secondary classifications:

Bartelt, M. W. (*with* Lewis, James T.; Meyers, Glenn) A generalized interpolation problem with variable nodes. **(80c:65025)**
Chenin, Patrick Une représentation intégrale de l'erreur d'interpolation. (English summary) **(80j:65007)**
Duchon, Jean Sur l'erreur d'interpolation des fonctions de plusieurs variables par les D^m-splines. (English summary) **(80j:41052)**
Gregory, John A. A blending function interpolant for triangles. **(80b:65011)**
Hornung, U. Monotone Spline-Interpolation. (English summary) **(80c:65026)**
Lewis, James T. *See* **Bartelt, M. W.; et al., (80c:65025)**
McLeod, Robin J. Y. On the stability of two-dimensional interpolation and high order bases for curved finite elements. **(80k:65013)**
Extensions and generalisations of rational and high order transformation methods. **(80k:65014)**
Meyers, Glenn *See* **Bartelt, M. W.; et al., (80c:65025)**
Micchelli, Charles A. Optimal estimation of smooth functions from inaccurate data. **(80i:65015)**

41A10 Approximation by polynomials {For approximation by trigonometric polynomials, see 42A10.}

Agarwal, J. P. *See* **Sinha, S. P., 80d:41009**
Arora, J. P. *See* **Mittal, S. C.; et al., 80g:41009**
Bihary, G. (*with* Prasad, R. S.) Minimax polynomial approximation to Struve's functions of order 0 and 1. **80j:41009**
Borosh, Itshak (*with* Chui, Charles K.; Smith, P. W.) On approximation of x^N by incomplete polynomials. **80i:41008**
Brass, Helmut Über die Koeffizienten der Polynome bester Approximation. **80f:41004**
Butzer, P. L. (*with* Stens, R. L.) The operational properties of the Chebyshev transform. II. Fractional derivatives. **80b:41004**
Chui, Charles K. *See* **Borosh, Itshak; et al., 80i:41008**
Collatz, Lothar Some applications of polynomial and spline approximation. **80j:41010**
Costantini, Paolo Best uniform approximation by constrained polynomials. (Italian. English summary) **80i:41009**
Demianov, V. I. Polynomials that have a minimal norm for a fixed derivative. (Russian) **80c:41002**
Ditzian, Z. A global inverse theorem for combinations of Bernštein polynomials. **80m:41003**
Džafarov, Arif S. Comparison of some classes of differentiable nonperiodic functions of one variable. (Russian) **80e:41001**
Farhutdinova, R. F. Approximate analytic formulas for coefficients of Zolotarev polynomials and the process of economization via Zolotarev polynomials. (Russian) **80d:41007**
Galeev, È. M. Letter to the editors: "The Zolotarev problem in the metric of $L_1([-1, 1])$" (Mat. Zametki **17** (1975), 13–20). (Russian) **80a:41004**
Geiger, Carl (*with* Opfer, Gerhard) Complex Chebyshev polynomials on circular sectors. **80m:41004**
Habib, Anwar *See* **Wafi, Abdul; et al., 80c:41003**
Khan, Huzoor H. *See* **Wafi, Abdul; et al., 80c:41003**
Kimchi, E. (*with* Richter-Dyn, Nira) A necessary condition for best approximation in monotone and sign-monotone norms. **80g:41008**
Lozner, L. G. The coefficients of extremal polynomials as their determining parameters. (Russian) **80f:41005**
Mason, J. C. Near-best L_∞ and L_1 approximations to analytic functions on two-dimensional regions. **80h:41001**
Mittal, S. C. (*with* Sinha, Rajiv; Arora, J. P.) On the degree of approximation of polynomial operators. **80g:41009**
Myers, Diane-Claire (*with* Raymon, Louis) Exact comonotone approximation. **80a:41005**
Narayanaswamy, Indira On a theorem of Sharma and Tzimbalario. **80e:41002**
Newman, Donald J. Efficient co-monotone approximation. **80j:41011**
Nguyễn Xuân Kỳ A contribution to the problem of weighted polynomial approximation of the derivative of a function by the derivative of its approximating polynomial. **80k:41002**
Ollin, Harold Z. Best uniform polynomial approximation to certain rational functions. **80m:41005**
Opfer, Gerhard *See* **Geiger, Carl, 80m:41004**
Ortiz, E. L. (*with* da Silva, M. R. J.) Polynomial approximations of shapes based on condensed representations of Bernštein polynomials in one and several variables. **80j:41012**
Phillips, G. M. Best polynomial approximations: a corrected proof. **80h:41002**
Polovina, A. I. Approximation of differentiable functions by algebraic polynomials. (Russian) **80a:41006**
Prasad, R. S. *See* **Bihary, G., 80j:41009**
Raymon, Louis *See* **Myers, Diane-Claire, 80a:41005**
Richter-Dyn, Nira *See* **Kimchi, E., 80g:41008**
Saff, Edward B. (*with* Varga, Richard S.) On incomplete polynomials. **80d:41008**
da Silva, M. R. J. *See* **Ortiz, E. L., 80j:41012**
Sinha, Rajiv *See* **Mittal, S. C.; et al., 80g:41009**
Sinha, S. P. (*with* Agarwal, J. P.) Exponentially weighted L_p and minimax polynomial approximations. **80d:41009**
Smith, P. W. *See* **Borosh, Itshak; et al., 80i:41008**
Somorjai, G. Müntz-type theorems. **80k:41003**
Stens, R. L. *See* **Butzer, P. L., 80b:41004**
Tkebučava, G. E. On the order of the growth of powers of lacunary algebraic basis in the space $C^m(I^d)$. (Russian summary) **80e:41003**
Varga, Richard S. *See* **Saff, Edward B., 80d:41008**
Wafi, Abdul (*with* Habib, Anwar; Khan, Huzoor H.) On generalized Bernstein polynomials. **80c:41003**

Secondary classifications:

Babaev, A. H. The asymptotic behavior of the best approximation in the metric $L_\psi[-1, 1]$

of a function of bounded p-variation. (Russian. Azerbaijani and English summaries) **(80j:41039)**

Fletcher, Yates (*with* Roulier, John A.) A counterexample to strong unicity in monotone approximation. **(80j:41030)**

(*with* Roulier, John A.) Approximation of functions with a positive derivative. **(80k:41012)**

Gautschi, Walter The condition of polynomials in power form. **(80f:65034)**

Görlich, E. (*with* Wallerath, P.) An example of a best possible Zamansky type inequality with exponential order. **(80k:42003)**

Istrăţescu, Vasile I. *See* **Onicescu, Octav, (80e:60071)**

Kimchi, E. (*with* Richter-Dyn, Nira) Restricted range approximation of k-convex functions in monotone norms. **(80a:41012)**

Kroó, A. A comparison of uniform and discrete polynomial approximation. (Russian summary) **(80g:41021)**

Mastroianni, Giuseppe (*with* Occorsio, Mario Rosario) A generalization of the Bernštein operator. (Italian. English summary) **(80a:41019)**

Occorsio, Mario Rosario *See* **Mastroianni, Giuseppe, (80a:41019)**

Onicescu, Octav (*with* Istrăţescu, Vasile I.) Approximation theorems for random functions. II. (Italian summary) **(80e:60071)**

Pych-Taberska, Paulina Some approximation properties of Bernštein and Kantorovič polynomials. **(80j:41026)**

Richter-Dyn, Nira *See* **Kimchi, E., (80a:41012)**

Roulier, John A. *See* **Fletcher, Yates, (80j:41030)** *and* **Fletcher, Yates, (80k:41012)**

Shisauchi, Hiroyuki On an approximation of Bessel function by the tau method. **(80k:33015)**

Stavskiĭ, M. Š. Approximation of continuous and differentiable functions in a locally compact field. (Russian) **(80f:12020)**

Švalova, È. Z. Construction of an element of the best approximation of a derivative. (Russian) **(80b:65019)**

Veselinov, V. M. The Hausdorff approximation by derivatives of linear operators and by Bernštein polynomials. (Russian) **(80f:41019)**

Wallerath, P. *See* **Görlich, E., (80k:42003)**

Watanabe, Satoshi On the linear combinations of the generalized Dirichlet kernels in the theory of approximation. **(80k:41010)**

41A15 Spline approximation

Barrar, R. B. (*with* Loeb, H. L.) On monosplines with odd multiplicity of least norm. **80j:41013**

Barrow, David L. (*with* Smith, P. W.) Asymptotic properties of best $L_2[0, 1]$ approximation by splines with variable knots. **80c:41004**

(*with* Smith, P. W.) Efficient L_2 approximation by splines. **80f:41010**

Behforooz, G. H. (*with* Papamichael, N.) Improved orders of approximation derived from interpolatory cubic splines. **80e:41004**

Berezovs'kiĭ, A. Ĭ. (*with* Hlobystov, V. V.) On a problem of spline-interpolation of functions on an interval. (Russian) **80j:41014**

Bojarincev, Ju. E. (*with* Korsukov, V. M.) Orthogonal systems of splines. (Russian) **80k:41004**

Carroll, M. P. The use of piecewise polynomial interpolation to generate best L_1 approximates. **80g:41010**

Cavaretta, A. S., Jr. (*with* Newman, Donald J.) Periodic interpolating splines and their limits. **80g:41011**

Cieselski, Zbigniew Convergence of spline expansions. **80e:41005**

Coman, Gh. Minimal monosplines in L_2 and optimal cubature formulae. **80k:41003**

Cox, M. G. The representation of polynomials in terms of B-splines. **80j:41015**

Demko, Stephen Interpolation by quadratic splines. **80e:41006**

Dikshit, H. P. On cubic interpolatory splines. **80f:41006**

Hall, Charles Vector-valued polynomial and spline approximation. **80j:41016**

Hlobystov, V. V. *See* **Berezovs'kiĭ, A. Ĭ., 80j:41014**

Jetter, Kurt L_1-Approximation verallgemeinerter konvexer Funktionen durch Splines mit freien Knoten. **80f:41007**

Korneĭčuk, M. P. Inequalities for the best approximation by splines of differentiable periodic functions. (Russian) **80j:41017**

Korsukov, V. M. *See* **Bojarincev, Ju. E., 80k:41004**

Lee, Seng Luan A class of cardinal lacunary interpolation problems by spline functions. **80m:41006**

Loeb, H. L. *See* **Barrar, R. B., 80j:41013**

Malozemov, V. N. (*with* Pevnyĭ, A. B.) Spline approximation of an arbitrary defect. (Russian) **80j:41018**

Medvedev, N. V. ★Применение сплайнов в теории приближений. (Russian) [Application of splines in approximation theory] **80a:41007**

Regularized stochastic splines (R-splines). (Russian) **80b:41005**

Meinardus, Günter (*with* Taylor, G. D.) Periodic quadratic spline interpolant of minimal norm. **80a:41008**

Polynomial splines and difference equations. **80j:41019**

Meir, A. Approximation by quadratic splines. **80g:41012**

Meyer, W. Weston (*with* Thomas, Donald H.) Erratum: "Variations on a theme by Schoenberg" [J. Approx. Theory **18** (1976), no. 1, 39–49]. **80g:41013**

Mühlbach, Günter A remark on calculating with B-splines. **80k:41005**

Mustăţa, Costică A characterization of semi-Chebyshevian sets in a metric space. **80g:41014**

Newman, Donald J. *See* **Cavaretta, A. S., Jr., 80g:41011**

Papamichael, N. *See* **Behforooz, G. H., 80e:41004**

Pevnyĭ, A. B. *See* **Malozemov, V. N., 80j:41018**

Schempp, Walter On the convergence of cardinal logarithmic splines. **80g:41015**

Schumberg, Hermann Tschebyscheff-Approximation mit rationalen splines bei freien Knoten. (English summary) **80j:41020**

Sharma, A. (*with* Tzimbalario, J.) Landau-type inequalities for some linear differential operators. **80f:41008**

Smith, P. W. *See* **Barrow, David L., 80c:41004** *and* **Barrow, David L., 80f:41010**

Strauss, Hans Optimale Quadraturformeln und Perfektsplines. **80m:41007**

Taylor, G. D. *See* **Meinardus, Günter, 80a:41008**

Thomas, Donald H. *See* **Meyer, W. Weston, 80g:41013**

el Tom, M. E. A. On best cubature formulas and spline interpolation. **80e:41007**

Totkov, G. A. Variations in spline-approximations of multidimensional functions. (Russian) **80m:41008**

Tzimbalario, J. Interpolation by complex splines. **80a:41009**

See also **Sharma, A., 80f:41008**

Werner, Helmut An introduction to nonlinear splines. **80j:41021**

Wronicz, Z. Approximation by complex splines. **80j:41022**

Secondary classifications:

Agarwal, Girdhar G. (*with* Studden, W. J.) Asymptotic design and estimation using linear splines. **(80j:62072)**

de Boor, Carl ★A practical guide to splines. **(80a:65027)**

Butterfield, K. R. The representation and handling of smooth three dimensional surfaces. **(80c:65030)**

Collatz, Lothar Some applications of polynomial and spline approximation. **(80j:41010)**

Delvos, F.-J. Splines and pseudo-inverses. (French summary) **(80a:65118)**

Demko, Stephen On bounding $\|A^{-1}\|_\infty$ for banded A. **(80g:65049)**

v. Golitschek, Manfred On n-widths and interpolation by polynomial splines. **(80j:41038)**

Hall, Charles Spline blended approximation of multivariate functions. **(80j:41006)**

Hloponin, S. S. Approximation of functions by continued fractions. (Russian) **(80c:41006)**

Kimeldorf, George *See* **Peele, Lawrence, (80f:62086)**

Korneĭčuk, M. P. Approximation of periodic functions by spline-functions. **(80l:42002)**

Mathis, F. H. (*with* Reddien, G. W.) Ritz-Trefftz approximations in optimal control. **(80e:49022)**

Neuman, E. Convex interpolating splines of odd degree. **(80d:41001)**

Peele, Lawrence (*with* Kimeldorf, George) Time series prediction functions based on imprecise observations. **(80f:62086)**

Poljakov, R. V. The approximate solution of systems of linear integral equations by means of splines. (Russian) **(80c:65251)**

Prasad, Jagdish (*with* Varma, A. K.) Lacunary interpolation by quintic splines. **(80k:41001)**

Reddien, G. W. *See* **Mathis, F. H., (80e:49022)**

Rvačov, V. O. Atomic functions. (Russian) **(80k:34089)**

Scheffold, Egon (*with* Schlosser, Karl-Heinz) Spline-Funktionen mehrerer Veränderlicher. (English summary) **(80l:41007)**

Schlosser, Karl-Heinz *See* **Scheffold, Egon, (80l:41007)**

(Sledge, Frank) *See* **Hall, Charles, (80j:41006)**

Studden, W. J. *See* **Agarwal, Girdhar G., (80j:62072)**

Varma, A. K. *See* **Prasad, Jagdish, (80k:41001)**

Wahba, Grace Improper priors, spline smoothing and the problem of guarding against model errors in regression. **(80f:62047)**

How to smooth curves and surfaces with splines and cross-validation. **(80m:65010)**

41A17 Inequalities in approximation (Bernštein, Jackson, Nikol'skiĭ type inequalities)

Nessel, R. J. (*with* Wilmes, G.) Nikol'skiĭ-type inequalities in connection with regular spectral measures. **80f:41009**

Nevai, Paul G. Bernštein's inequality in L^p for $0 < p < 1$. **80m:41009**

Oswald, P. Ungleichungen vom Jackson-Typ für die algebraische beste Approximation in L_p. **80f:41010**

Tihomirov, V. M. Extremal problems in approximation theory and the diameters of smooth functions. (Russian) **80m:41010**

Wilmes, G. *See* **Nessel, R. J., 80f:41009**

Secondary classifications:

Benke, George Trigonometric approximation theory in compact totally disconnected groups. **(80a:41034)**

Ganzburg, M. I. Some inequalities for polynomials and entire functions of finite degree in symmetric spaces. (Russian) **(80e:46021)**

Nikol'skiĭ, S. M. Some inequalities for the functions of the weight classes. **(80j:46059)**

Temljakov, V. N. Approximation of periodic functions of several variables with bounded mixed derivative. (Russian) **(80k:42008)**

41A20 Approximation by rational functions

Agahanov, S. A. (*with* Zagirov, N. Š.) Approximation of the function sign x in the uniform and the integral metric by rational fractions. (Russian) **80a:41010**

Bennett, Colin (*with* Rudnick, Karl; Vaaler, Jeffrey D.) Note on best approximation of $|x|$. **80k:41006**

Blatt, Hans-Peter Ein hinreichendes Kriterium für geometrische Konvergenz rationaler Tschebyscheff-Approximationen auf $[0, \infty]$. **80m:41011**

Borwein, Peter Arbitrarily slow rational approximations on the positive real line. **80c:41005**

Carta, David G. Minimax approximation by rational fractions of the inverse polynomial type. **80l:41011**

Erdős, Paul (*with* Newman, Donald J.; Reddy, A. R.) Rational approximation. II. **80c:41008**

Ganelius, T. Rational approximation to x^α on $[0, 1]$. (Russian summary) **80b:41004**

Hloponin, S. S. Approximation of functions by continued fractions. (Russian) **80c:41006**

Kaufman, E. H., Jr. (*with* Taylor, G. D.) Uniform approximation with rational functions having negative poles. **80f:41011**

Lee, Cheng-Ming (*with* Roberts, F. D. K.) Corrigenda: "A comparison of algorithms for rational l_∞ approximation" (Math. Comp. 27 (1973), 111–121). **80e:41009**
Newman, Donald J. Rational approximation to x^n. **80j:41023**
(*with* Reddy, A. R.) Rational approximation to e^x and to related functions. **80j:41024**
See also **Erdős, Paul; et al., 80e:41008**
Popov, V. A. Uniform approximation of functions with derivatives of bounded variation and its applications. **80h:41005**
Reddy, A. R. A note on rational approximation to $(1-x)^{1/2}$. **80j:41025**
See also **Erdős, Paul; et al., 80e:41008** *and* **Newman, Donald J., 80j:41024**
Roberts, F. D. K. *See* **Lee, Cheng-Ming, 80e:41009**
Rudnick, Karl *See* **Bennett, Colin; et al., 80h:41006**
Saff, Edward B. (*with* Varga, Richard S.) Nonuniqueness of best complex rational approximations to real functions on real intervals. **80f:41012**
Taylor, G. D. *See* **Kaufman, E. H., Jr., 80f:41011**
Vasler, Jeffrey D. *See* **Bennett, Colin; et al., 80h:41006**
Varga, Richard S. *See* **Saff, Edward B., 80f:41012**
Videnskiĭ, V. S. Bernšteĭn-type polynomial in rational fractions. (Russian. Latvian and English summaries) **80m:41012**
Vjačeslavov, N. S. The rate of approximation of piecewise-analytic functions by rational fractions in L_p metrics, $0<p<\infty$. (Russian) **80h:41006**
Wulbert, Daniel E. The rational approximation of real functions. **80i:41012**
Zagirov, N. Š. *See* **Agahanov, S. A., 80a:41010**

Secondary classifications:

Brenner, Philip (*with* Thomée, Vidar) On rational approximations of semigroups. **(80j:47052)**
Ganelius, T. Some extremal functions and approximation. **(80j:30054)**
Grigorjan, M. D. Approximation by rational fractions in Orlicz spaces without the Δ_2-condition. (Russian. Armenian summary) **(80i:46026)**
Hedberg, Lars Inge Approximation in L^p by analytic and harmonic functions. **(80j:46046)**
Keener, L. Existence of best uniform approximations by reciprocals. **(80j:41042)**
O'Farrell, Anthony G. Rational approximation in Lipschitz norms. II. **(80m:30044)**
Pekarskiĭ, A. A. Rational approximation of continuous functions with given moduli of continuity and change. (Russian. English summary) **(80a:65034)**
Schomberg, Hermann Tschebyscheff-Approximation mit rationalen splines bei freien Knoten. (English summary) **(80j:41020)**
Selby, M. A. On completeness with respect to a Carathéodory-like metric. **(80a:46027)**
Sevast'janov, E. A. Rational approximation and absolute convergence of Fourier series. (Russian) **(80f:42008)**
Thomée, Vidar *See* **Brenner, Philip, (80j:47052)**
Williams, Jack Characterization and computation of rational Chebyshev approximations in the complex plane. **(80h:65007)**

41A21 Padé approximation

Achuthan, P. Padé approximants (an introduction to theory and applications). **80g:41016**
Iserles, Arieh On the A-acceptability of Padé approximations. **80i:41014**
On the generalized Padé approximations to the exponential function. **80i:41013**
Reczek, K. Zur Padéschen Approximation der konvergenten Funktionenfolgen. **80e:41010**

Secondary classifications:

Eletskiĭ, V. L. (*with* Popov, V. S.) Summation of perturbation-theory series by the Padé and Padé-Borel methods. **(80k:81026)**
Jones, William B. (*with* Thron, W. J.) Sequences of meromorphic functions corresponding to a formal Laurent series. **(80f:30029)**
Loxton, J. H. (*with* Van der Poorten, Alfred J.) Multidimensional generalizations of the Padé table. **(80h:30037)**
Murphy, J. A. (*with* O'Donohoe, M. R.) A two-variable generalization of the Stieltjes-type continued fraction. **(80k:40001)**
O'Donohoe, M. R. *See* **Murphy, J. A., (80k:40001)**
Pindor, Maciej Matrix variational Padé approximants and multistep square-well potentials. **(80h:81036)**
Popov, V. S. *See* **Eletskiĭ, V. L., (80k:81026)**
Thron, W. J. *See* **Jones, William B., (80f:30029)**
Van der Poorten, Alfred J. *See* **Loxton, J. H., (80h:30037)**
Wandeland, Haakon General T-fractions corresponding to functions satisfying certain boundedness conditions. **(80k:30010)**
Limit-periodic general T-fractions and holomorphic functions. **(80k:30011)**
(Wuytack, L.) *See* **Padé approximation and its applications, (80m:41001)**
Antwerp *See* **Padé approximation and its applications, (80m:41001)**
Conference:
Padé Approximation and its Applications *See* **Padé approximation and its applications, (80m:41001)**
Padé approximation and its applications ★Padé approximation and its applications. **(80m:41001)**

41A25 Rate of convergence, degree of approximation

Berdyšev, V. I. On the uniform continuity of metric projection. **80m:41013**
Iliev, G. L. Exact estimates for partially monotone approximation. (Russian summary) **80h:41007**
Pych-Taberska, Paulina Some approximation properties of Bernšteĭn and Kantorovič polynomials. **80j:41026**
Stark, E. L. The measure of approximation in $L^2_{2\pi}$. **80j:41027**
Wood, Bruce Degree of L_p-approximation by certain positive convolution operators. **80a:41011**

Secondary classifications:

Baskakov, V. A. Asymptotic behavior of the approximation of continuous functions of classes Lip α by Jackson polynomials. (Russian) **(80i:42001)**
Benke, George Trigonometric approximation theory in compact totally disconnected groups. **(80a:41034)**
Blatt, Hans-Peter Ein hinreichendes Kriterium für geometrische Konvergenz rationaler Tschebyscheff-Approximationen auf $[0, \infty]$. **(80m:41011)**
Borwein, Peter Arbitrarily slow rational approximations on the positive real line. **(80c:41005)**
Clarlet, Philippe G. Interpolation error estimates for the reduced Hsieh-Clough-Tocher triangle. **(80i:65114)**
Görlich, E. (*with* Wallerath, P.) An example of a best possible Zamansky type inequality with exponential order. **(80k:42003)**
Mastroianni, Giuseppe (*with* Occorsio, Mario Rosario) A generalization of the Bernštein operator. (Italian. English summary) **(80a:41019)**
Newman, Donald J. (*with* Reddy, A. R.) Rational approximation to e^x and to related functions. **(80j:41024)**
Occorsio, Mario Rosario *See* **Mastroianni, Giuseppe, (80a:41019)**
Prasad, Jagdish On the uniform convergence of interpolatory polynomials. **(80d:41006)**
Pych-Taberska, Paulina On the degree of pointwise convergence of some singular integrals. **(80k:42006)**
Reddy, A. R. *See* **Newman, Donald J., (80j:41024)**
Saff, Edward B. (*with* Varga, Richard S.) Nonuniqueness of best complex rational approximations to real functions on real intervals. **(80f:41012)**
Sikkema, P. C. On the exact degree of local approximation with convolution operators. **(80j:41033)**
Varga, Richard S. *See* **Saff, Edward B., (80f:41012)**
Videnskiĭ, V. S. Bernšteĭn-type polynomial in rational fractions. (Russian. Latvian and English summaries) **(80m:41012)**
Wallerath, P. *See* **Görlich, E., (80k:42003)**

41A27 Inverse theorems

Brass, Helmut Umkehrsätze beim Trapezverfahren. **80i:41015**

41A28 Simultaneous approximation

Cheney, E. W. *See* **Phillips, G. M.; et al., 80m:41014**
Holland, A. S. B. (*with* McCabe, J. H.; Phillips, G. M.; Sahney, Badri N.) Best simultaneous L_1 approximations. **80j:41028**
Mach, Jaroslav Best simultaneous approximation of bounded functions with values in certain Banach spaces. **80i:41016**
McCabe, J. H. *See* **Holland, A. S. B.; et al., 80j:41028** *and* **Phillips, G. M.; et al., 80m:41014**
Phillips, G. M. (*with* McCabe, J. H.; Cheney, E. W.) On simultaneous Chebyshev approximation. **80m:41014**
See also **Holland, A. S. B.; et al., 80j:41028**
Sahney, Badri N. *See* **Holland, A. S. B.; et al., 80j:41028**

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Bosznay, Adam P. A remark on simultaneous approximation. **(80j:41054)**

41A29 Approximation with constraints

Cantoni, Antonio *See* **Evans, Robin J., 80j:41029**
Chalmers, B. L. (*with* Taylor, G. D.) Uniform approximation with constraints. **80d:41010**
Evans, Robin J. (*with* Cantoni, Antonio) A note on least-squares approximation with range constraints. **80j:41029**
Fletcher, Yates (*with* Roulier, John A.) A counterexample to strong unicity in monotone approximation. **80j:41030**
Kimchi, E. (*with* Richter-Dyn, Nira) Restricted range approximation of k-convex functions in monotone norms. **80a:41012**
Richter-Dyn, Nira On best nonlinear approximation in sign-monotone norms and in norms induced by inner products. **80j:41031**
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Roulier, John A. *See* **Fletcher, Yates, 80j:41030**
Taylor, G. D. *See* **Chalmers, B. L., 80d:41010**

Secondary classifications:

Mitsui, Taketomo The initial-value adjusting method for solving problems of the least squares type of ordinary differential equations. **(80f:65083)**
Narayanaswamy, Indira On a theorem of Sharma and Tzimbalario. **(80e:41002)**
Popov, V. A. Direct and converse theorems for oneside approximation. **(80c:42002)**

41A30 Approximation by other special function classes

Bestehorn, Maike Der Existenzsatz für die Tschebyscheff-Approximation mit Exponentialsummen mit polynomialen Exponenten. **80k:41007**
Braess, Dietrich Chebyshev approximation by γ-polynomials. III. On the number of best approximations. (German summary) **80a:41013**
Dixon, M. *See* **Korevaar, J., 80f:41013**
Guariglia, Emma Functions that can be approximated by means of functions of the class C^∞. (Italian) **80e:41011**
Iliev, G. L. Parametric approximations of partial analytic functions. **80g:41017**
Keener, L. Uniqueness of exponential approximation of a function and its derivative. **80a:41014**
Kimchi, E. (*with* Richter-Dyn, Nira) Convergence properties of sequences of functions

with application to restricted derivative approximation. **80a:41015**

Korevaar, J. (*with* Dixon, M.) Nonspanning sets of exponentials on curves. **80f:41013**

McGlinn, Robert J. Approximations by exponential sums on discrete and continuous domains. **80j:41032**

Petz, D. On a problem of D. Newman. **80a:41016**

Richter-Dyn, Nira *See* **Kimchi, E., 80a:41015**

Tomić, Miloš Angular approximation of functions with a dominated mixed modulus of smoothness. (Russian) **80e:41012**

Secondary classifications:

Bestehorn, Maike Tschebyscheff-Approximation mit Exponentialsummen mit polynomialen Exponenten. (English summary) **(80j:41040)**

Collatz, Lothar Application of multivariate approximation to the solution of boundary value problems. **(80c:65218)**

Hlopunin, S. S. Approximation of functions by continued fractions. (Russian) **(80c:41006)**

Kammler, David W. Least squares approximation of completely monotonic functions by sums of exponentials. **(80h:65006)**

L_1-approximation of completely monotonic functions by sums of exponentials. **(80i:41024)**

Somorjai, G. Müntz-type theorems. **(80k:41003)**

Zencke, Peter Zur Parametrisierung reeller Exponentialsummen durch lineare Differentialgleichungen mit Parameterrestriktionen. (English summary) **(80d:65013)**

41A35 Approximation by operators (in particular, by integral operators)

Bauer, Heinz Approximation and abstract boundaries. **80f:41014**

Ditzian, Z. On global inverse theorems of Szász and Baskakov operators. **80h:41008**

Ismail, Mourad E.-H. (*with* May, C. Ping) On a family of approximation operators. **80a:41017**

Jiménez Pozo, Miguel A. On the question of the convergence of a sequence of linear operators. (Russian. English summary) **80c:41007**

Kloc, B. E. Best linear and nonlinear approximations of smooth functions. **80c:41008**

Maier, Volker L_p-approximation by Kantorovič operators. (Russian summary) **80b:41006**

Mastroianni, Giuseppe On the approximation of continuous functions by linear operators. (Italian. English summary) **80a:41018**

(*with* Occorsio, Mario Rosario) A generalization of the Bernštein operator. (Italian. English summary) **80a:41019**

May, C. Ping *See* **Ismail, Mourad E.-H., 80a:41017**

Micchelli, Charles A. (*with* Pinkus, Allan) Some problems in the approximation of functions of two variables and n-widths of integral operators. **80a:41020**

Müller, Manfred W. L_p-approximation by the method of integral Meyer-König and Zeller operators. **80a:41021**

Musaev, B. I. The order of the approximation of a singular integral taken over a segment of a real straight line. (Russian. Azerbaijani and English summaries) **80d:41011**

Occorsio, Mario Rosario *See* **Mastroianni, Giuseppe, 80a:41019**

Pathak, Ashutosh Approximation of a function by a singular integral in L_1-norm. **80h:41009**

Pinkus, Allan *See* **Micchelli, Charles A., 80a:41020**

Pottinger, Peter On the C^k-approximation by Baskakov-operators. **80i:41017**

Rathore, R. K. S. Lipschitz-Nikolskiĭ constants and asymptotic simultaneous approximation of the M_n-operators. **80a:41022**

Sikkema, P. C. Approximation formulae of Voronovskaya-type for certain convolution operators. **80i:41018**

On the exact degree of local approximation with convolution operators. **80j:41033**

Swetits, J. J. (*with* Wood, Bruce) Approximation by discrete operators. **80d:41012**

Vasil'ev, R. K. Convergence of isotonic operators to the identity operator. (Russian) **80c:41009**

Veselinov, V. M. The Hausdorff approximation by derivatives of linear operators and by Bernštein polynomials. (Russian) **80i:41019**

Wood, Bruce *See* **Swetits, J. J., 80d:41012**

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Jagerman, D. L. An inversion technique for the Laplace transform with application to approximation. **(80m:44004)**

Muiclak, Julian Approximation by singular modulars. **(80j:40003)**

Pych-Taberska, Paulina On the degree of pointwise convergence of some singular integrals. **(80k:42006)**

Wood, Bruce Degree of L_p-approximation by certain positive convolution operators. **(80a:41011)**

41A36 Approximation by positive operators

Deeba, Elias Y. Some remarks on the approximation properties of a generalized Szász operator. **80i:41020**

Eisenberg, Sheldon M. Korovkin's theorem. **80j:41034**

Kurc, W. Linear positive operators generated by Lagrange series and approximation of functions. **80i:41021**

van der Meer, P. J. C. *See* **Sikkema, P. C., 80h:41010**

Mohapatra, R. N. A note on approximation of continuous functions by generalised Szász operators. **80c:41010**

Müller, Manfred W. Approximation unbeschränkter Funktionen bezüglich einer Korovkin-Metrik. **80j:41035**

Prédi, Maria Sur l'approximation des fonctions par des opérateurs linéaires et positifs. **80h:41008**

Sikkema, P. C. (*with* van der Meer, P. J. C.) The exact degree of local approximation by linear positive operators involving the modulus of continuity of the pth derivative. **80h:41010**

Stancu, D. D. Approximation of bivariate functions by means of some Bernštein-type operators. **80f:41015**

Swetits, J. J. On summability and positive linear operators. **80e:41013**

Vasil'ev, R. K. Equivalence of convergence conditions for isotone and positive additive operators. (Russian) **80h:41011**

Ziegler, Zvi Complete monotonicity properties of certain approximation operators. **80k:41009**

Secondary classifications:

Bauer, Heinz (*with* Leha, Gottlieb; Papadopoulou, Susanne) Determination of Korovkin closures. **(80k:46019)**

Flösser, Hans-Otto (*with* Roth, Walter) Korovkinhüllen in Funktionenräumen. **(80f:46024)**

Leha, Gottlieb *See* **Bauer, Heinz; et al., (80k:46019)**

Papadopoulou, Susanne *See* **Bauer, Heinz; et al., (80k:46019)**

Roth, Walter *See* **Flösser, Hans-Otto, (80f:46024)**

Wood, Bruce Degree of L_p-approximation by certain positive convolution operators. **(80a:41011)**

41A40 Saturation

Bočvarišvili, M. A. A boundary property of the Poisson integral. (Russian. Georgian and English summaries) **80j:41036**

Boissier, Monique Étude de certaines moyennes de Hölder dans le cas d'un espace de Banach E muni d'une suite d'opérateurs orthogonaux continus $(u_k)_{k\in N}$. (English summary) **80c:41011**

Détermination des classes de saturation des procédés de Hölder dans le cas d'un espace de Banach E muni d'une suite d'opérateurs orthogonaux continus $(u_k)_{k\in N}$. (English summary) **80j:41037**

Butzer, P. L. (*with* Stens, R. L.; Wehrens, M.) Saturation classes of the Cesàro and Abel-Poisson means of Fourier-Legendre series. **80h:41012**

Ditzian, Z. Local saturation of modified Bernstein polynomials in k dimensions. **80f:41022**

May, C. Ping A saturation theorem for modified Bernstein polynomials in L_p-spaces. **80c:41012**

Riemenschneider, S. D. The L^p-saturation of the Bernštein-Kantorovitch polynomials. **80g:41018**

Somorjai, G. On a saturation problem. **80a:41023**

Stens, R. L. *See* **Butzer, P. L.; et al., 80h:41012**

Watanabe, Satoshi On the linear combinations of the generalized Dirichlet kernels in the theory of approximation. **80k:41010**

Wehrens, M. *See* **Butzer, P. L.; et al., 80h:41012**

Secondary classifications:

Grundmann, Axel Saturation theorems for Bernstein polynomials in Banach subspaces of $C(I, \mathbb{R})$. **(80i:41030)**

Nishishiraho, Toshihiko Saturation of trigonometric polynomial operators. **(80g:42004)**

Onneweer, C. W. Differentiation of fractional order on p-groups, approximation properties. (Russian summary) **(80m:43010)**

41A44 Best constants

van der Meer, P. J. C. On the degree of approximation by certain linear positive operators. **80c:41013**

Schurer, F. (*with* Steutel, F. W.) On the degree of approximation by the operators of de la Vallée Poussin. **80h:41013**

Steutel, F. W. *See* **Schurer, F., 80h:41013**

Secondary classifications:

Korneĭčuk, N. P. Inequalities for the best approximation by splines of differentiable periodic functions. (Russian) **(80j:41017)**

41A45 Approximation by arbitrary linear expressions

Secondary classifications:

Shapiro, Harold S. Comparative approximation in two topologies. **(80j:41064)**

41A46 Approximation by arbitrary nonlinear expressions; widths and entropy

Dudley, R. M. Correction to: "Metric entropy of some classes of sets with differentiable boundaries" [J. Approximation Theory **10** (1974), 227–236; MR **50** #10633]. **80k:41011**

v. Golitschek, Manfred On n-widths and interpolation by polynomial splines. **80j:41038**

Maiorov, V. E. Various diameters of the class H_p^r in the space L_q. (Russian) **80e:41014**

Melkman, Avraham A. (*with* Micchelli, Charles A.) Spline spaces are optimal for L^2 n-width. **80d:41013**

Micchelli, Charles A. (*with* Pinkus, Allan) The n-widths of rank $n+1$ kernels. **80g:41019**

See also **Melkman, Avraham A., 80d:41013**

Pevac, Lazar Some results about approximation of sets by finite sets in normed spaces. **80i:41023**

Pinkus, Allan *See* **Micchelli, Charles A., 80g:41019**

Zames, G. On the metric complexity of causal linear systems: ε-entropy and ε-dimension for continuous time. **80g:41020**

Secondary classifications:

Konovalov, V. M. On the problem of widths of classes of analytic functions. (Russian) **(80a:46015)**

Pinkus, Allan Matrices and n-widths. **(80k:15026)**
Toger, A. V. The ε-entropy of the unit sphere of the Hölder space $H_p^{k,\varphi}$ in the space L_q. (Russian) **(80d:46067)**

41A50 Best approximation, including Čebyšev systems

Babaev, A. H. The asymptotic behavior of the best approximation in the metric $L_q[-1, 1]$ of a function of bounded p-variation. (Russian. Azerbaijani and English summaries) **80j:41039**
Bestehorn, Maike Tschebyscheff-Approximation mit Exponentialsummen mit polynomialen Exponenten. (English summary) **80j:41040**
Coray, Chris (*with* Heal, E. R.) On positive functions in Haar spaces. **80f:41016**
Demirov, V. I. On the geometric analysis of the L-moment problem. (Russian) **80b:41007**
Dunham, Charles B. Nearby alternating Chebyshev approximation. **80m:41015**
Chebyshev approximation by polynomials plus $B\varphi(Cx)$. **80k:41014**
Computation of transformed linear Chebyshev approximations. **80j:41041**
See also **Schmidt, Eckard**, **80k:41015**
Fletcher, Yates (*with* Roulier, John A.) Approximation of functions with a positive derivative. **80k:41012**
Ganzburg, M. I. A multidimensional limit theorem of the theory of best polynomial approximations. (Russian) **80k:41013**
Garkavi, A. L. Approximate centers and nets of a set in a linear normed space. (Russian) **80m:41016**
Heal, E. R. *See* **Coray, Chris**, **80f:41016**
Kammler, David W. L_1-approximation of completely monotonic functions by sums of exponentials. **80i:41024**
Keener, L. Existence of best uniform approximations by reciprocals. **80j:41042**
Kroó, A. A comparison of uniform and discrete polynomial approximation. (Russian summary) **80g:41021**
Lapidot, Eitan On complete Tchebycheff-systems. **80f:41017**
Laurie, D. P. Relatively best Chebyshev approximations to $\exp(t)$. **80a:41024**
Lorentz, G. G. Incomplete polynomials of best approximation. **80a:41025**
Micchelli, Charles A. On an extremal problem of Subbotin concerning finite differences and derivatives. **80k:41014**
Morozov, È. N. A remark on the existence of vector-valued Čebyšev systems. (Russian) **80a:41026**
Nürnberger, Günther (*with* Sommer, Manfred) Weak Chebyshev subspaces and continuous selections for the metric projection. **80a:41027**
Roulier, John A. *See* **Fletcher, Yates**, **80k:41012**
Schaback, Robert On alternation numbers in nonlinear Chebyshev approximation. **80f:41025**
Schmidt, Eckard (*with* Dunham, Charles B.) Discontinuity of the alternating Chebyshev operator. **80k:41015**
Sestzu, S. On the construction of the best approximation of linear functionals in the sense of Sard. (Italian. English summary) **80k:41016**
Singer, Ivan Generalizations of methods of best approximation to convex optimization in locally convex spaces. II. Hyperplane theorems. **80m:41017**
Singh, Sankatha P. Application of fixed point theorems in approximation theory. **80j:41043**
Smarzewski, R. On weak Chebyshev subspaces and Chebyshev approximation by their elements. (Polish summary) **80f:41018**
Sommer, Manfred *See* **Nürnberger, Günther**, **80a:41027**
Stockenberg, Bernd Weak Tchebyshev-spaces and generalizations of a theorem by Krein. **80f:41019**
Storoženko, È. A. Approximation by algebraic polynomials in the space L^p, $0<p<1$. (Russian. English summary) **80a:41028**
Watson, G. A. Dual methods for nonlinear best approximation problems. **80m:41018**
Zielke, Roland Einige Eigenschaften schwacher Tschebyscheff-Systeme. **80f:41020**

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Abatzoglou, Theagenis J. The minimum norm projection on C^2-manifolds in $\mathbf{R}^n$. **(80a:58006)**
Ahuja, G. C. (*with* Narang, T. D.) On best simultaneous approximation. **(80g:41024)**
Albrand, Hans-Jürgen Diskrete lineare Approximation und zyklische Einzelschrittverfahren. **(80a:65028)**
Barrow, David L. (*with* Smith, P. W.) Efficient L_2 approximation by splines. **(80i:41010)**
Bestehorn, Maike Der Existenzsatz für die Tschebyscheff-Approximation mit Exponentialsummen mit polynomialen Exponenten. **(80k:41007)**
Bistritz, Y. (*with* Langholz, G.) Model reduction by best Chebyshev rational approximations in the complex plane. **(80g:93004)**
Björnestål, B. O. Local Lipschitz continuity of the metric projection operator. **(80k:41019)**
Boznay, Adam P. A remark on simultaneous approximation. **(80j:41054)**
Braess, Dietrich Chebyshev approximation by γ-polynomials. III. On the number of best approximations. (German summary) **(80a:41013)**
Collatz, Lothar Some applications of approximation theory to differential equations. **(80i:34019)**
Dinfarov, Arif S. Comparison of some classes of differentiable nonperiodic functions of one variable. (Russian) **(80e:41001)**
Fletcher, Yates (*with* Roulier, John A.) A counterexample to strong unicity in monotone approximation. **(80j:41030)**
Kimchi, E. (*with* Richter-Dyn, Nira) Restricted range approximation of k-convex functions in monotone norms. **(80a:41012)**
Korneĭčuk, N. P. Inequalities for the best approximation by splines of differentiable periodic functions. (Russian) **(80j:41017)**
Langholz, G. *See* **Bistritz, Y.**, **(80g:93004)**
Narang, T. D. *See* **Ahuja, G. C.**, **(80g:41024)**
Ollin, Harold Z. Best uniform polynomial approximation to certain rational functions. **(80m:41005)**
Phillips, G. M. Best polynomial approximations: a corrected proof. **(80k:41002)**
Richter-Dyn, Nira On best nonlinear approximation in sign-monotone norms and in norms induced by inner products. **(80j:41031)**
See also **Kimchi, E.**, **(80a:41012)**
Roulier, John A. *See* **Fletcher, Yates**, **(80j:41030)**
Schomberg, Hermann Tschebyscheff-Approximation mit rationalen splines bei freien Knoten. (English summary) **(80j:41020)**
Smith, P. W. *See* **Barrow, David L.**, **(80i:41010)**
Van de Vel, H. Haar intervals for trigonometric polynomials. **(80k:65017)**

41A52 Uniqueness of best approximation

Brannigan, M. A linear space where strongly unique elements of best approximation exist. **80m:41019**
Gutknecht, Martin H. Nonstrong uniqueness in real and complex Chebyshev approximation. **80j:41044**

Secondary classifications:

Barrar, R. B. (*with* Loeb, H. L.) On monosplines with odd multiplicity of least norm. **(80j:41013)**
Dunham, Charles B. Chebyshev approximation by polynomials plus $B\varphi(Cx)$. **(80k:41014)**
Loeb, H. L. *See* **Barrar, R. B.**, **(80j:41013)**
Vlasov, L. P. The uniqueness of generalized elements of best approximation. (Russian) **(80j:41065)**

41A55 Approximate quadratures

Barrow, David L. On multiple node Gaussian quadrature formulae. **80j:41045**
The topological degree applied to some problems in approximation theory. **80f:41021**
Bojanov, Borislav ★Методи за приближено пресмятане на интеграли. (Bulgarian) [Methods for the approximate computation of integrals] **80b:41008**
Borosh, Itshak (*with* Chui, Charles K.) On characterization of functions by their Gauss-Chebyshev quadratures. **80c:41014**
Chui, Charles K. *See* **Borosh, Itshak**, **80c:41014**
Costabile, Francesco (*with* Luceri, Rossana) The existence of k-dimensional quadrature formulas with nonnegative weights. (Italian. English summary) **80k:41017**
Dobra, I. D. On optimal quadrature formulae in Lipschitz-classes. **80j:41046**
Gânscă, Ioan Best quadrature formulas with relatively few terms. **80j:41047**
Girlovitš, J. (*with* Levin, M. I.) Extremal problems for cubature formulas. (Estonian and Russian summaries) **80a:41029**
Guliev, R. D. (*with* Musaev, B. I.) The convergence of interpolational quadrature formulas that contain derivatives for singular integrals. (Russian. Azerbaijani and English summaries) **80k:41015**
Levin, M. I. On optimal recovery of functions satisfying given boundary conditions. (Estonian and Russian summaries) **80k:41016**
See also **Girlovitš, J.**, **80a:41029**
Luceri, Rossana *See* **Costabile, Francesco**, **80k:41017**
Lupaš, N. E. Optimal quadrature formulas for classes of functions with L_p integrable rth derivative in L_p. (Russian. English summary) **80j:41048**
Musaev, B. I. *See* **Guliev, R. D.**, **80k:41015**
Newman, Donald J. Quadrature formulae for H^p functions. **80g:41022**
Onegov, L. A. Approximate calculation of singular integrals with Hilbert type kernels. (Russian) **80a:41030**
Potempa, H. Modifizierte Restgliedabschätzungen für Quadraturformeln. (English summary) **80d:41014**
Šabozov, M. An error estimate for cubature formulas that are exact for splines on some classes of two-variable functions. (Russian) **80k:41018**
Salihov, G. N. *See* **Žamalov, Z. Ž.**; et al., **80m:41020**
Šaripov, T. H. *See* **Žamalov, Z. Ž.**; et al., **80m:41020**
Shapiro, Harold S. Integral representation of remainder functionals in one and several variables. **80c:41015**
Sobol', I. M. Weighted quadrature formulas. (Russian) **80i:41026**
Žamalov, Z. Ž. (*with* Salihov, G. N.; Šaripov, T. H.) Approximate integration of smooth functions. (Russian) **80m:41020**
Zenzykbaev, A. A. Characteristic properties of best quadrature formulas. (Russian) **80f:41022**

Secondary classifications:

Bolkov, I. V. Application of quadrature formulas to the calculation of singular integrals. (Russian) **(80i:65028)**
Braß, Helmut Umkehrsätze beim Trapezverfahren. **(80i:41015)**
Didur, L. I. *See* **Polovinkin, V. I.**, **(80a:65049)**
Freeden, W. An application of a summation formula to numerical computation of integrals over the sphere. **(80b:65024)**
Katev, T. P. Construction of quadrature formulas. (Bulgarian. Russian and English summaries) **(80a:65046)**
Loxton, J. H. (*with* Sanders, J. W.) The kernel of a rule of approximate integration. **(80m:65016)**
Lyness, J. N. (*with* Monegato, G.) Quadrature error functional expansions for the simplex when the integrand function has singularities at vertices. **(80m:65017)**
Monegato, G. *See* **Lyness, J. N.**, **(80m:65017)**
Musaev, B. I. The order of approximation of a singular integral over the interval of a real line by quadrature sums. (Russian. Azerbaijani and English summaries) **(80c:65051)**
Polovinkin, V. I. (*with* Didur, L. I.) Asymptotically optimal sequences of Hermitian cubature formulas. (Russian) **(80a:65049)**
Sanders, J. W. *See* **Loxton, J. H.**, **(80m:65016)**

Strauss, Hans Untersuchungen über Quadraturformeln. **(80k:65023)**
el Tom, M. E. A. On best cubature formulas and spline interpolation. **(80e:41007)**

41A58 Series expansions (e.g. Taylor, Lidstone series, but not Fourier series)

Djoković, Dragomir Ž. A property of the Taylor expansion of a class of rational functions in several variables. **80e:41015**

Secondary classifications:

Seznec, R. (*with* Zinn-Justin, J.) Summation of divergent series by order dependent mappings: application to the anharmonic oscillator and critical exponents in field theory. **(80j:81036)**
Zinn-Justin, J. *See* **Seznec, R., (80j:81036)**

41A60 Asymptotic approximations, asymptotic expansions (steepest descent, etc.) [See also 30E15.]

de Bruijn, N. G. An asymptotic problem on iterated functions. **80j:41049**
(Bryčkov, Ju. A.) *See* **Olver, F., 80a:41031**
Olver, F. ★Введение в асимптотические методы и специальные функции. (Russian) [Introduction to asymptotics and special functions] **80a:41031**
(Prudnikov, A. P.) *See* **Olver, F., 80a:41031**
Riedel, Roland Asymptotische Darstellung verallgemeinerter Fourierintegrale. I. **80a:41032**
Schell, Hans-Joachim Asymptotische Darstellungen für Parameterintegrale mit zwei reellen Parametern. II. **80j:41050**
Trenogin, V. A. Asymptotic expansions on families of Banach spaces. (Russian) **80j:41051**

Secondary classifications:

Alberverio, Sergio (*with* Høegh-Krohn, Raphael) Feynman path integrals and the corresponding method of stationary phase. **(80k:81035)**
Barancev, R. G. (*with* Ėngel'gardt, V. N.) Asymptotic behavior of integrals of Airy functions with a power weight. (Russian) **(80j:33013)**
Bujalance García, J. A. (*with* García Olmos, M. I.; González-Gascón, F.) Methods of calculating the principal term of parametric divergent integrals. (Spanish. English summary) **(80f:65018)**
Čubanova, N. A. Asymptotic behaviour of the Fourier coefficients for the Dirichlet problem in an unbounded domain with a curvilinear part of the boundary. (Russian. English summary) **(80i:35018)**
Cooke, J. C. Note on the principle of stationary phase. **(80j:65014)**
Crothers, D. S. F. Comment on: "Asymptotic expansions for parabolic cylinder functions" (J. Phys. B 11 (1978), no. 18, L531–L533) by C. Lozano and F. W. J. Olver. **(80g:33008)**
Drummond, J. E. On reducing to zero the remainder of an asymptotic series. **(80m:30045)**
Ėngel'gardt, V. N. *See* **Barancev, R. G., (80j:33013)**
García Olmos, M. I. *See* **Bujalance García, J. A.; et al., (80f:65018)**
Gianuzzi, Gennaro The asymptotic behaviour of the zeros of the Legendre s-polynomial of order 3. (Italian. English summary) **(80g:33019)**
González-Gascón, F. *See* **Bujalance García, J. A.; et al., (80f:65018)**
Høegh-Krohn, Raphael *See* **Albeverio, Sergio, (80k:81035)**
Kapuścik, E. Asymptotic estimates in quantum field theory. **(80k:81130)**
Lozano, C. (*with* Olver, F.) Asymptotic approximations for parabolic cylinder functions. **(80g:33007)**
See also **Crothers, D. S. F., (80g:33008)**
Lyness, J. N. (*with* Monegato, G.) Quadrature error functional expansions for the simplex when the integrand function has singularities at vertices. **(80m:65017)**
McClure, J. P. (*with* Wong, R.) Explicit error terms for asymptotic expansions of Stieltjes transforms. **(80a:44003)**
Monegato, G. *See* **Lyness, J. N., (80m:65017)**
Olver, F. *See* **Lozano, C., (80g:33007)** *and* **Crothers, D. S. F., (80g:33008)**
(Pančenkov, A. M.) *See* **Asymptotic methods in systems theory, (80f:00002)**
Wong, R. Asymptotic expansions of fractional integrals involving logarithms. **(80b:26007)**
See also **McClure, J. P., (80a:44003)**
Yoshikawa, Atsushi Abstract aspects of asymptotic analysis. **(80j:58065)**
Asymptotic methods in systems theory ★Асимптотические методы в теории систем. (Russian) [Asymptotic methods in systems theory] **(80f:00002)**
Systems theory *See* **Asymptotic methods in systems theory, (80f:00002)**

41A63 Multidimensional problems (should also be assigned at least one other classification number in this section)

Cheney, E. W. (*with* McCabe, J. H.; Phillips, G. M.) A mixed-norm bivariate approximation problem with applications to Lewanowicz operators. **80i:41027**
See also **von Golitschek, M., 80g:41023**
Donner, Klaus Korovkin closures for positive linear operators. **80f:41023**
Duchon, Jean Sur l'erreur d'interpolation des fonctions de plusieurs variables par les D^m-splines. (English summary) **80j:41052**
von Golitschek, M. (*with* Cheney, E. W.) On the algorithm of Diliberto and Straus for approximating bivariate functions by univariate ones. **80g:41023**
McCabe, J. H. *See* **Cheney, E. W.; et al., 80i:41027**
Phillips, G. M. *See* **Cheney, E. W.; et al., 80i:41027**

Secondary classifications:

Dahlberg, Björn E. J. On the distribution of Fekete points. **(80c:31003)**
Ganzburg, M. I. A multidimensional limit theorem of the theory of best polynomial approximations. (Russian) **(80k:41013)**
Hausmann, Werner (*with* Knoop, H.-B.) On two-dimensional interpolation. **(80j:41007)**
Knoop, H.-B. *See* **Hausmann, Werner, (80j:41007)**
Mastroianni, Giuseppe On the approximation of continuous functions by linear operators. (Italian. English summary) **(80a:41018)**
Predoi, Maria Sur l'approximation des fonctions par des opérateurs linéaires et positifs. **(80k:41008)**
Stanca, D. D. Approximation of bivariate functions by means of some Bernštein-type operators. **(80f:41015)**
Stynes, Martin On faster convergence of the bisection method for certain triangles. **(80c:51020)**
Watson, G. A. Dual methods for nonlinear best approximation problems. **(80m:41018)**

41A65 Abstract approximation theory (approximation in normed linear spaces and other abstract spaces)

Ahuja, G. C. (*with* Narang, T. D.; Trehan, Swaran) Certain results on best approximation and continuity of metric projections. **80a:41033**
(*with* Narang, T. D.) On best simultaneous approximation. **80g:41024**
Amick, Charles J. Approximation by smooth functions in Sobolev spaces. **80g:41025**
Andreev, V. I. Continuity of the metric projection and approximate compactness of subspaces in $L_1(S, \Sigma, \mu)$. (Russian) **80m:41021**
Appling, William D. L. Integrability and closest approximation representations. **80i:41028**
Bacopoulos, A. (*with* Godini, G.; Singer, I.) On best approximation in vector-valued norms. **80j:41053**
Benke, George Trigonometric approximation theory in compact totally disconnected groups. **80a:41034**
Berdyšev, V. I. Uniform continuity of the metric projection and of the ν-projection. (Russian) **80m:41022**
Björnestål, B. O. Local Lipschitz continuity of the metric projection operator. **80k:41019**
Blatt, Hans-Peter A general Remes algorithm in real or complex normed linear spaces. **80i:41029**
Boznay, Adam P. A remark on simultaneous approximation. **80j:41054**
Brown, A. L. Chebyshev subspaces of finite codimension in spaces of continuous functions. **80e:41016**
Cheney, E. W. *See* **Gordon, W. J., 80a:41035**
Dupont, Todd (*with* Scott, L. Ridgway) Constructive polynomial approximation in Sobolev spaces. **80j:41055**
Franchetti, Carlo (*with* Singer, Ivan) Deviation and farthest points in normed linear spaces. **80m:41023**
Gasca González, M. (*with* Lisbona, F. J.) On the approximation of linear forms. (Spanish) **80k:41020**
Godini, G. *See* **Bacopoulos, A.; et al., 80j:41053**
Goodman, T. N. T. (*with* Lee, Seng Luan) A class of generalized cardinal splines. **80k:41021**
Göpfert, Alfred Über Werteannahme bei einer Klasse von Optimalproblemen. (English and Russian summaries) **80j:41056**
Gordon, W. J. (*with* Cheney, E. W.) Bivariate and multivariate interpolation with noncommutative projectors. **80a:41035**
Grundmann, Axel Saturation theorems for Bernstein polynomials in Banach subspaces of $C(I, \mathbb{R})$. **80i:41030**
Huet, Denise Approximation d'un espace de Banach et perturbations singulières. (English summary) **80i:41031**
Karlovitz, L. A. Remarks on the construction of Schauder bases and on the Pólya algorithm. **80k:41022**
Korneĭčuk, N. P. Diameters in L_p of classes of continuous and differentiable functions and the optimal reconstruction of functions and their derivatives. (Russian) **80b:41009**
Koščeev, V. A. Connectedness and "sun" properties of sets in Banach spaces. (Russian) **80e:41017**
Kozlowska, Grażyna Approximation by entire functions of two variables in Orlicz spaces with mixed norms. (Polish. Russian and English summaries) **80j:41057**
Lee, Seng Luan *See* **Goodman, T. N. T., 80k:41021**
Lewanowicz, Stanisław A projection connected with the Fourier-Chebyshev operator. (Russian summary) **80j:41058**
Lisbona, F. J. *See* **Gasca González, M., 80k:41020**
Mach, Jaroslav On the existence of best simultaneous approximation. **80j:41059**
Meinguet, Jean A practical method for estimating approximation errors in Sobolev spaces. **80j:41060**
Musielak, Julian An application of modular spaces to approximation. **80f:41024**
Naidu, S. Venkata Ratnam *See* **Sastry, K. P. R., 80i:41033**
Narang, T. D. Corrigendum: "Existence and unicity of best approximation and different types of continuity of proximity maps" (Bull. Calcutta Math. Soc. **69** (1977), no. 1, 39–43). **80d:41015**
See also **Ahuja, G. C.; et al., 80a:41033** *and* **Ahuja, G. C., 80g:41024**
Nevesenko, N. V. The metric projection and connectedness of sets in linear normed spaces. (Russian) **80h:41017**
Papini, P. L. Sheltered points in normed spaces. **80j:41061**
Pleśniak, W. On a theorem of S. N. Bernštein in F-spaces. **80j:41062**
Poleunis, F. (*with* Van de Vel, H.) Characterizability of best approximations by means of a Kolmogorov criterion. **80j:41063**
Rao, Geetha S. Interpolative subspaces, interpolative widths and interpolative maps. **80i:41032**
Sastry, K. P. R. (*with* Naidu, S. Venkata Ratnam) On best simultaneous approximation in normed linear spaces. **80i:41033**
Scott, L. Ridgway *See* **Dupont, Todd, 80j:41055**

Shapiro, Harold S. Comparative approximation in two topologies. **80j:41064**
Singer, I. *See* **Bacopoulos, A.; et al., 80j:41053**
Singer, Ivan *See* **Franchetti, Carlo, 80m:41023**
Singh, Sankatha P. An application of a fixed-point theorem to approximation theory. **80g:41026**
Sommer, Manfred Continuous selections of the metric projection for 1-Chebyshev spaces. **80h:41018**
Trehan, Swaran *See* **Ahuja, G. C.; et al., 80a:41033**
Van de Vel, H. *See* **Polemis, F., 80j:41063**
Vasil'ev, A. I. In a linear metric space, the Čebyšev line is not necessarily approximately compact. (Russian) **80m:41024**
Vlasov, L. P. The uniqueness of generalized elements of best approximation. (Russian) **80j:41065**
Zajíček, Luděk On the points of multivaluedness of metric projections in separable Banach spaces. **80b:41010**

Secondary classifications:

Amir, Dan (*with* Deutsch, Frank) Another approximation theoretic characterization of inner product spaces. **(80d:46039)**
Bauer, Heinz Approximation and abstract boundaries. **(80f:41014)**
Berdyšev, V. I. On the uniform continuity of metric projection. **(80m:41013)**
Bosznay, Adam P. A remark on the linearity of metric projections. **(80d:46040)**
Bourgin, D. G. Some problems, conjectures and methods in analysis. **(80k:55009)**
Brannigan, M. A linear space where strongly unique elements of best approximation exist. **(80m:41019)**
Cobzaş, S. Antiproximinal sets in Banach spaces of c_0-type. **(80f:46012)**
Deutsch, Frank *See* **Amir, Dan, (80d:46039)**
Dickmeis, W. (*with* Nessel, R. J.) On Banach-Steinhaus theorems with orders. **(80k:47024)**
(*with* Roeckerath, M. Th.) On stable limit laws with orders and their connection to numerical analysis. **(80i:65860)**
Donner, Klaus Korovkin closures for positive linear operators. **(80f:41023)**
Dunham, Charles B. *See* **Schmidt, Eckard, (80k:41015)**
Egorov, A. D. A class of functions in Hilbert space that are uniformly approximable by polynomials, with prescribed weight. (Russian. English summary) **(80d:46085)**
Fakhoury, Hicham Approximation des bornés d'un espace de Banach par des compacts et applications. **(80a:47063)**
Approximation des bornés d'un espace Banach par des compacts et applications à l'approximation des opérateurs bornés. (English summary) **(80g:47024)**
Fliesser, Hans-Otto (*with* Roth, Walter) Korovkinhüllen in Funktionenräumen. **(80f:46024)**
Garkavi, A. L. Approximate centers and nets of a set in a linear normed space. (Russian) **(80m:41016)**
Godini, G. On suns. **(80a:46012)**
Grigorjan, M. D. Approximation by rational fractions in Orlicz spaces without the Δ_2-condition. (Russian. Armenian summary) **(80i:46026)**
Hedberg, Lars Inge Two approximation problems in function spaces. **(80c:46042)**
Keener, L. On smoothness and proximal points. **(80c:46025)**
Korniĭčuk, M. P. Approximation of periodic functions by spline-functions. **(80i:42002)**
Mach, Jaroslav (*with* Ward, Joseph D.) Approximation by compact operators on certain Banach spaces. **(80j:47054)**
Best simultaneous approximation of bounded functions with values in certain Banach spaces. **(80i:41016)**
Nachbin, Leopoldo Sur la densité des sous-algèbres polynomiales d'applications continûment différentiables. **(80d:46046)**
Nanda, Sudarsan Simultaneous farthest points in normed linear spaces. **(80d:46030)**
Nessel, R. J. (*with* Wilmes, G.) Nikol'skiĭ-type inequalities in connection with regular spectral measures. **(80f:41009)**
See also **Dickmeis, W., (80k:47024)**
Nürnberger, Günther (*with* Sommer, Manfred) Weak Chebyshev subspaces and continuous selections for the metric projection. **(80a:41027)**
Odinec, V. P. Minimal projections. Uniqueness conditions. (Russian) **(80c:46029)**
Onneweer, C. W. Differentiation of fractional order on p-groups, approximation properties. (Russian summary) **(80m:43010)**
Păltineanu, G. A generalization of the Stone-Weierstrass theorem for weighted spaces. **(80d:46047)**
Pevac, Lazar Some results about approximation of sets by finite sets in normed spaces. **(80i:41023)**
Predoi, Maria Sur l'approximation des fonctions par des opérateurs linéaires et positifs. **(80k:41008)**
Richter-Dyn, Nira On best nonlinear approximation in sign-monotone norms and in norms induced by inner products. **(80j:41031)**
Rivlin, T. J. Some aspects of optimal recovery. **(80i:41001)**
Roeckerath, M. Th. *See* **Dickmeis, W., (80i:65860)**
Roth, Walter *See* **Fliesser, Hans-Otto, (80f:46024)**
Schmidt, Eckard (*with* Dunham, Charles B.) Discontinuity of the alternating Chebyshev operator. **(80k:41015)**
Singer, Ivan Some classes of nonlinear operators generalizing the metric projections onto Čebyšev subspaces. **(80j:47089)**
Sommer, Manfred *See* **Nürnberger, Günther, (80a:41027)**
Stavskiĭ, M. Š. Approximation of continuous and differentiable functions in a locally compact field. (Russian) **(80f:12020)**
Ward, Joseph D. *See* **Mach, Jaroslav, (80j:47054)**
Wilmes, G. *See* **Nessel, R. J., (80f:41009)**
Yost, David T. Best approximation and intersections of balls in Banach spaces. **(80m:46019)**
Živkov, N. V. Metric projections and antiprojections in strictly convex normed spaces. **(80f:46018)**

41A99 Miscellaneous topics

42–XX FOURIER ANALYSIS

42–01 Elementary exposition, textbooks

Brown, James Ward *See* **Churchill, Ruel V., 80c:42001**
Churchill, Ruel V. (*with* Brown, James Ward) ★Fourier series and boundary value problems. **80c:42001**
Edwards, Robert E. ★Fourier series. A modern introduction. Vol. 1. **80j:42001**
(Nikulin, M. S.) *See* **Oberhettinger, F., 80j:42002**
Oberhettinger, F. ★Преобразования Фурье распределений и их обращения. Таблицы. (Russian) [Fourier transforms of distributions and their inverses. Tables] **80j:42002**

Secondary classifications:

Myers, David L. *See* **Wilcox, Howard, (80c:28001)**
Wilcox, Howard (*with* Myers, David L.) ★An introduction to Lebesgue integration and Fourier series. **(80c:28001)**

42–02 Advanced exposition (research surveys, monographs, etc.)

42–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Burkill, J. C. John Edensor Littlewood. **(80h:01027)**
(Fefferman, Charles Louis) *See* **Moser, Jürgen, (80a:01037)**
(Littlewood, John Edensor) *See* **Burkill, J. C., (80h:01027)**
Mackey, George W. Harmonic analysis as the exploitation of symmetry—a historical survey. **(80j:01019)**
Moser, Jürgen Fields medals. III. A broad attack on analysis problems. **(80a:01037)**
Bibliography:
Littlewood, John Edensor *See* **Burkill, J. C., (80h:01027)**
Biography:
Fefferman, Charles Louis *See* **Moser, Jürgen, (80a:01037)**
Obituary:
Littlewood, John Edensor *See* **Burkill, J. C., (80h:01027)**

42–04 Explicit machine computation and programs (not the theory of computation or programming)

42–06 Proceedings, conferences, etc.

(Alexits, G.) *See* **Fourier analysis and approximation theory, 80d:42001a** *and* **Fourier analysis and approximation theory, 80d:42001b**
(Rivière, Nestor M.) *See* **Harmonic analysis in Euclidean spaces, 80f:42001a** *and* **Harmonic analysis in Euclidean spaces, 80f:42001b**
(Turán, Pál) *See* **Fourier analysis and approximation theory, 80d:42001a** *and* **Fourier analysis and approximation theory, 80d:42001b**
(Wainger, Stephen) *See* **Harmonic analysis in Euclidean spaces, 80f:42001a** *and* **Harmonic analysis in Euclidean spaces, 80f:42001b**
(Weiss, Guido) *See* **Harmonic analysis in Euclidean spaces, 80f:42001a** *and* **Harmonic analysis in Euclidean spaces, 80f:42001b**
Approximation theory *See* **Fourier analysis and approximation theory, 80d:42001a** *and* **Fourier analysis and approximation theory, 80d:42001b**
Budapest *See* **Fourier analysis and approximation theory, 80d:42001a** *and* **Fourier analysis and approximation theory, 80d:42001b**
Colloquia Mathematica Societatis János Bolyai *See* **Fourier analysis and approximation theory, 80d:42001a** *and* **Fourier analysis and approximation theory, 80d:42001b**
Colloquium:
Fourier Analysis and Approximation Theory *See* **Fourier analysis and approximation theory, 80d:42001a** *and* **Fourier analysis and approximation theory, 80d:42001b**
Euclidean spaces *See* **Harmonic analysis in Euclidean spaces, 80f:42001a** *and* **Harmonic analysis in Euclidean spaces, 80f:42001b**
Fourier analysis and approximation theory ★Fourier analysis and approximation theory. Vol. I. **80d:42001a**
★Fourier analysis and approximation theory. Vol. II. **80d:42001b**
Harmonic analysis *See* **Séminaire: Analyse Harmonique, 80j:42003**
Harmonic analysis in Euclidean spaces ★Harmonic analysis in Euclidean spaces. Part 1. **80f:42001a**
★Harmonic analysis in Euclidean spaces. Part 2. **80f:42001b**
Proceedings of Symposia in Pure Mathematics *See* **Harmonic analysis in Euclidean spaces, 80f:42001a** *and* **Harmonic analysis in Euclidean spaces, 80f:42001b**
Séminaire:
Analyse Harmonique ★Séminaire d'Analyse Harmonique (1977–1978). **80j:42003**
Symposium:
Harmonic Analysis in Euclidean Spaces *See* **Harmonic analysis in Euclidean spaces, 80f:42001a** *and* **Harmonic analysis in Euclidean spaces, 80f:42001b**
Williamstown, Mass. *See* **Harmonic analysis in Euclidean spaces, 80f:42001a** *and* **Harmonic analysis in Euclidean spaces, 80f:42001b**

Secondary classifications:

(Ciesielski, Zbigniew) *See* **Approximation theory, (80i:41003)**
Approximation theory ★Approximation theory. **(80i:41003)**
Warsaw *See* **Approximation theory, (80i:41003)**

42Axx Fourier analysis in one variable

42A05 Trigonometric polynomials, inequalities, extremal problems

Berman, D. L. On an extremal polynomial operator. (Russian) **80a:42001**

Kudrjavcev, L. D. Functions that stabilize to trigonometric polynomials. (Russian) **80g:42001**

Patel, K. A. Series representation of functions of two variables and the Dirichlet problem. **80k:42001**

Pulatov, A. I. A criterion for the orthogonality of a system of trigonometric polynomials. (Russian) **80e:42002**

Sambandham, M. On a random trigonometric polynomial. **80c:42001**

Secondary classifications:

Čanturija, Z. A. On orthogonal polynomial bases in the spaces C and L. (Russian summary) **(80h:46051)**

42A10 Trigonometric approximation

Andrusevskiĭ, N. M. (*with* Židkov, N. P.; Ščedrin, B. M.) Optimal approximation of functions by a finite number of their Fourier coefficients. (Russian) **80f:42002**

Baskakov, V. A. Asymptotic behavior of the approximation of continuous functions of classes Lip α by Jackson polynomials. (Russian) **80k:42001**

Baiseikova, I. B. On the question of approximating functions by Ahiezer-Kreĭn-Favard sums. (Russian. English summary) **80e:42003**

Bebe, Kenneth P. C^m convergence of trigonometric interpolants. **80g:42002**

Dudas, V. O. Approximation of conjugate periodic functions by de la Vallée Poussin sums. (Russian) **80j:42004**

Görlich, E. (*with* Wallerath, P.) An example of a best possible Zamansky type inequality with exponential order. **80k:42003**

Gupta, S. C. *See* **Siddiqi, A. H., 80m:42003**

Holland, A. S. B. (*with* Kuttner, Brian; Sahney, Badri N.) Approximation by interpolating polynomials. **80g:42003**

Kahane, Jean-Pierre (*with* Katznelson, Yitzhak) Mauvaise approximation par polynômes trigonométriques dans certaines algèbres de convolution. (English summary) **80k:42004**

Katiana, R. C. On the degree of approximation to a function by the Cesàro means of its Fourier-Laguerre expansions. **80m:42001**

Katznelson, Yitzhak *See* **Kahane, Jean-Pierre, 80k:42004**

Kivinukk, A. Comparison theorems for summation processes of Fourier expansions in a Banach space. (Russian. Estonian and English summaries) **80j:42005**

Korneĭčuk, M. P. Approximation of periodic functions by spline-functions. **80i:42002**

Kozlowska, Grażyna The order of approximation of functions $f(x, y) \in L^p(-\pi, \pi; -\pi, \pi)$ by certain linear means of their Fourier series. (Polish. Russian and English summaries) **80j:42006**

Kuttner, Brian *See* **Holland, A. S. B.; et al., 80g:42003**

Leindler, L. On inverse type theorems related to the strong approximation of Fourier series. **80j:42007**

Strong and best approximation of Fourier series and the Lipschitz classes. (Russian summary) **80a:42002**

Strong approximation and classes of functions. **80d:42002**

On the strong summability and approximation of Fourier series. **80k:42002**

Strong approximation of Fourier series and structural properties of functions. **80m:42002**

Lenski, Włodzimierz On the norm-strong approximation of 2π-periodic functions. **80a:42003**

Strong approximation of functions by the triangular partial sums of double Fourier series. **80k:42005**

Nishishirabe, Toshihiko Saturation of trigonometric polynomial operators. **80g:42004**

Popov, V. A. Direct and converse theorems for oneside approximation. **80c:42002**

Pych-Taberska, Paulina On the degree of pointwise convergence of some singular integrals. **80k:42006**

Sahney, Badri N. *See* **Holland, A. S. B.; et al., 80g:42003**

Ščedrin, B. M. *See* **Andrusevskiĭ, N. M.; et al., 80f:42002**

Siddiqi, A. H. (*with* Gupta, S. C.) On the approximation by Walsh functions. **80m:42003**

Stypiński, Zenon On a generalization of the theorem of Prössdorf. **80k:42007**

Taberski, Roman Trigonometric approximation in the spaces L^p $(1 < p < \infty)$. **80m:42004**

Temljakov, V. N. Approximation of periodic functions of several variables with bounded mixed derivative. (Russian) **80k:42008**

Tomić, Miloš Remarques sur l'approximation locale par les sommes partielles et par les sommes de Fejér de séries de Fourier. **80m:42005**

Wallerath, P. *See* **Görlich, E., 80k:42003**

Watanabe, Satoshi On the linear combinations of trigonometric polynomial operators in the theory of approximation. **80f:42003**

Zaderei, P. J. Approximation of conjugate functions of two variables by Fourier and Fejér sums. (Russian) **80f:42004**

Židkov, N. P. *See* **Andrusevskiĭ, N. M.; et al., 80f:42002**

Žuk, V. V. Some sharp inequalities for seminorms given on the sets of periodic functions and their applications to the extremal problems of the theory of best approximations. (Russian. English summary) **80j:42008**

Secondary classifications:

Benke, George Trigonometric approximation theory in compact totally disconnected groups. **(80a:41034)**

Berman, D. L. On an extremal polynomial operator. (Russian) **(80a:42001)**

Butzer, P. L. (*with* Stens, R. L.; Wehrens, M.) Saturation classes of the Cesàro and Abel-Poisson means of Fourier-Legendre series. **(80h:41012)**

Dym, Harry A problem in trigonometric approximation theory. **(80j:60058)**

Gabdulhaev, B. G. Optimization of the numerical methods of solution of integral equations. (Russian) **(80f:65143)**

Schurer, F. (*with* Steutel, F. W.) On the degree of approximation by the operators of de la Vallée Poussin. **(80h:41013)**

Seghier, A. Prédiction d'un processus stationnaire du second ordre de covariance connue sur un intervalle fini. **(80j:60060)**

Stens, R. L. *See* **Butzer, P. L.; et al., (80h:41012)**

Steutel, F. W. *See* **Schurer, F., (80h:41013)**

Watanabe, Satoshi On the linear combinations of the generalized Dirichlet kernels in the theory of approximation. **(80k:41010)**

Wehrens, M. *See* **Butzer, P. L.; et al., (80h:41012)**

42A15 Trigonometric interpolation

Newman, Donald J. (*with* Rubel, Lee A.) On osculatory interpolation by trigonometric polynomials. **80i:42003**

Rubel, Lee A. *See* **Newman, Donald J., 80i:42003**

Secondary classifications:

Arora, J. L. On Poisson's sine formula. **(80j:33003)**

Henrici, Peter Barycentric formulas for interpolating trigonometric polynomials and their conjugates. **(80m:65009)**

Hristov, Vladimir H. (*with* Petrušev, P. P.) An improvement of Dini-Lipschitz condition. **(80j:42013)**

Petrušev, P. P. *See* **Hristov, Vladimir H., (80j:42013)**

42A16 Fourier coefficients, Fourier series of functions with special properties, special Fourier series

Alïnbaeva, E. Transformations of Fourier coefficients of certain classes of $\varphi(L)$ functions. (Russian. Kazakh summary) **80d:42003**

Balašov, L. A. (*with* Teljakovskiĭ, S. A.) Integrability of trigonometric series with a lacunary sequence of second differences of coefficients. (Russian) **80a:42004**

(*with* Prohorenko, V. I.) On the Fourier coefficients of contracted functions. (Russian summary) **80k:42009**

Bočorišvili, M. A. Functions satisfying the generalized Lipschitz and Zygmund conditions in an Orlicz space. (Russian) **80e:42004**

Čanturija, Z. A. Polynomial algebraic bases of the space L_p. (Russian) **80b:42001**

Černjak, L. Majorants of partial sums of some series expansions. (Russian) **80i:42004**

Cohen, Elaine On the Fourier coefficients and continuity of functions of class $\mathrm{V}_\Phi{}^*$. **80m:42006**

Karimov, S. K. Some conditions for the membership in $L_p(0, 2\pi)$ of a function with a transformed Fourier series. (Russian) **80j:42009**

Conditions for the continuity of functions with a transformed Fourier series. (Russian) **80k:42001**

Körner, T. W. On the theorem of Ivašev-Musatov. II. (French summary) **80a:42005**

Mukhopadhyay, S. N. Summable trigonometric series. **80d:42004**

Paltzin, Carlos On a problem of moments. I. **80k:42010**

Pandey, G. S. On a sequence of Fourier coefficients. **80b:42002**

Prohorenko, V. I. *See* **Balašov, L. A., 80k:42009**

Rubinštein, A. I. Parseval's equality. (Russian) **80k:42011**

Teljakovskiĭ, S. A. On integrability of lacunary trigonometric series with weight. **80d:42005**

See also **Balašov, L. A., 80a:42004**

Waterman, Daniel Fourier series of functions of Λ-bounded variation. **80j:42010**

Xie, Ting Fan On a theorem of Siddiqi. (Chinese) **80g:42005**

Secondary classifications:

Chan, Ling Yau Some properties of asymptotic functions and their applications. **(80a:26001)**

Goes, Günther Multiplier representations of sequence spaces with applications to Lipschitz spaces and spaces of functions of generalized bounded variation. **(80a:42010)**

Kotljar, B. D. Singular numbers of integral operators. (Russian) **(80d:47078)**

Pisier, Gilles Sur l'espace de Banach des séries de Fourier aléatoires presque sûrement continues. **(80j:60054)**

Sunouchi, Gen-ichirô Uniform summability of Fourier series at a point of continuity. **(80f:42007)**

42A20 Convergence of Fourier and trigonometric series

Ahobadze, T. I. Trigonometric Fourier series. (Russian. Georgian and English summaries) **80j:42011**

Asatiani, V. O. Uniform convergence of means of a negative order of Fourier series. (Russian. Georgian and English summaries) **80j:42012**

Balshanski, Bogdan M. On Carleson's convergence theorem for L^2 functions. **80m:42007**

Čanturija, Z. A. Conditions for the uniform convergence of Fourier series. (Russian. Georgian and English summaries) **80m:42008**

Garrett, J. W. (*with* Rees, C. S.; Stanojević, Č. V.) On L^1 convergence of Fourier series with quasi-monotone coefficients. **80e:42005**

Heladze, Š. V. The convergence of Fourier series in the almost everywhere sense and in the metric of L. **80g:42006**

Hristov, Vladimir H. (*with* Petrušev, P. P.) Sufficient conditions for convergence of Fourier series. (Russian) **80h:42002**

(*with* Petrušev, P. P.) An improvement of Dini-Lipschitz condition. **80j:42013**

Lukašenko, S. Ju. Sets of divergence and nonsummability for trigonometric series. (Russian. English summary) **80j:42014**

Marcus, Michael B. (*with* Pisier, Gilles) ★Necessary and sufficient conditions for the uniform convergence of random trigonometric series. **80m:42009**

Pekarskiĭ, A. A. Remark on a paper by K. I. Oskolkov. (Russian) **80g:42007**
Petrushev, P. P. *See* Hristov, Vladimir H., **80h:42002** *and* Hristov, Vladimir H., **80j:42013**
Pisier, Gilles *See* Marcus, Michael B., **80m:42009**
Rees, C. S. *See* Garrett, J. W.; et al., **80e:42005**
Stanojević, Č. V. *See* Garrett, J. W.; et al., **80e:42005**

Secondary classifications:

Koljada, V. I. Essential continuity of summable functions. (Russian) **80k:26002)**
Prasad, Rajendra (*with* Saxena, Ashok K.) On the Nörlund summability of Fourier-Jacobi series. **80k:42014)**
Saxena, Ashok K. *See* Prasad, Rajendra, **80k:42014)**
Waterman, Daniel Fourier series of functions of Λ-bounded variation. **80j:42010)**

42A24 Summability of Fourier and trigonometric series

Baiarstanova, A. S. Summation of subsequences of partial sums of trigonometric Fourier series. (Russian. Kazakh summary) **80k:42012**
Bugrov, Ja. S. On linear summation methods of Fourier series. (Russian summary) **80i:42005**
Chandra, Prem Summability of Fourier series by Euler means. **80k:42013**
(*with* Yadava, Virendra Singh) Absolute summability of series associated with Fourier series by Riesz means. **80k:42003**
(*with* Yadava, Virendra Singh) The $|E, q|$-summability of a series associated with Fourier series. **80g:42008**
Crowley, B. J. B. Some generalisations of the Poisson summation formula. **80m:42010a**
Corrigenda: "Some generalisations of the Poisson summation formula" [J. Phys. A **12** (1979), no. 11, 1951–1955]. **80m:42010b**
Ivović, Miodrag Ž. On linear methods of summation of Fourier series. **80a:42006**
Pandey, G. S. Multipliers for $|C, 1|$ summability of Fourier series. **80f:42005**
Patra, B. On the summability of derived Fourier series by Riesz's typical means. **80a:42007**
Petrović, A. Ju. The summability of generalized Fourier series. (Russian. English summary) **80b:42003**
Prakash, Ved On matrix summability of Fourier series. (Hindi. English summary) **80g:42009**
Prasad, Rajendra (*with* Saxena, Ashok K.) On the Nörlund summability of Fourier-Jacobi series. **80k:42014**
On the uniform Nörlund summability of Legendre series. **80m:42011**
Saxena, Ashok K. *See* Prasad, Rajendra, **80k:42014**
Shoop, Richard A. Some applications of (f, d_n) summability. **80m:42012**
The Lebesgue constants for (f, d_n)-summability. **80f:42006**
Siddiqi, Jamil A. The determination of the jump of a function by Nörlund means. **80a:42008**
Singh, K. N. *See* Tripathi, L. M., **80k:42015**
Singh, Tikam On the absolute summability factors of Fourier-Laguerre expansion. **80c:42003**
Corrigendum to: "On absolute summability factors of Fourier-Hermite series" [Bull. Calcutta Math. Soc. **68** (1976), no. 2, 125–130; MR **57** #3734]. **80m:42013**
Stypiński, Zenon On summability of Fourier series by Rogosinski's means. **80j:42015**
Sunouchi, Gen-ichirô Uniform summability of Fourier series at a point of continuity. **80f:42007**
Totik, V. On the strong summation of Fourier series with variable exponents. (Russian summary) **80m:42014**
Trigub, R. M. Linear methods for the summation of simple and multiple Fourier series and their approximate properties. (Russian) **80j:42016**
Tripathi, L. M. (*with* Singh, K. N.) On the Nörlund summability of the conjugate derived series of the Fourier series. **80k:42015**
Yadav, Sarjoo Prasad Absolute Riesz summability sequences for Fourier series. **80h:42004**
Yadava, Virendra Singh *See* Chandra, Prem, **80g:42008** *and* Chandra, Prem, **80h:42003**

Secondary classifications:

Barve, S. *See* Chandra, Prem, **(80g:40010)**
Beohar, B. K. (*with* Jadiya, Banshi Lal) Absolute Cesàro summability of Laguerre expansion. (Hindi. English summary) **(80g:42022)**
Chandra, Prem (*with* Barve, S.) Absolute matrix summability factors of infinite series and their application to Fourier series. **(80g:40010)**
Choudhary, R. S. Localisation relating to the summability $|C, 1|$ of Fourier-Jacobi series. (Hindi. English summary) **(80d:42012)**
Jadiya, Banshi Lal *See* Beohar, B. K., **(80g:42022)**
Leindler, L. Strong approximation and classes of functions. **(80d:42002)**
Schwinn, Hans Summierbarkeit von Orthogonalreihen durch Euler-Verfahren und Linearkombinationen von Euler-Verfahren. **(80k:42026)**

42A28 Absolute convergence, absolute summability

Čanturija, Z. A. On the absolute convergence of Fourier series of classes $V[n^\alpha]$. **80i:42006**
Absolute convergence of Fourier series. (Russian. Georgian and English summaries) **80c:42006**
Chandra, Prem Absolute summability by (E, q) means. **80j:42017**
Ganguly, Ashok *See* Jain, R. K., **80h:42005**
Gautam, L. P. *See* Gupta, B. L., **80i:42007**
Geĭt, V. È. The absolute convergence of Fourier series. (Russian) **80c:42007**
Gupta, B. L. (*with* Gautam, L. P.) On the $|E, q|$ summation of derived Fourier series and its conjugate series. **80i:42007**
Hotta, G. C. Absolute matrix summability of the conjugate series of a Fourier series. **80m:42015**
On absolute Nörlund summability of a series related to the conjugate series of a Fourier series. **80j:42018**
Jain, R. K. (*with* Ganguly, Ashok) Strong summability by logarithmic method of derived Fourier series and its conjugate series. **80h:42005**
Jena, S. C. *See* Kishore, Nand, **80d:42007**
Kanno, Kôsi On the absolute Nörlund summability factors of a Fourier series and its conjugate series at a point. **80d:42006**
Khan, Huzoor H. *See* Umar, Sarfaraz, **80d:42008**
Kishore, Nand (*with* Jena, S. C.) On absolute matrix summability of a conjugate series. **80d:42007**
Lal, Shiva Narain (*with* Ram, R. D.) On the localization of the summability $|(R, \lambda_n, 1)(C, r)|$ of the rth derived series of a Fourier series. **80j:42019**
Prasad, Kanhaiya *See* Sinha, S. R., **80m:42016**
Ram, R. D. *See* Lal, Shiva Narain, **80j:42019**
Sevast'janov, E. A. Rational approximation and absolute convergence of Fourier series. (Russian) **80f:42008**
Sinha, S. R. (*with* Prasad, Kanhaiya) On the absolute Riesz summability of a factored Fourier series. **80m:42016**
Szalay, I. On the generalized absolute Cesàro summability of Fourier series. **80k:42006**
Umar, Sarfaraz (*with* Khan, Huzoor H.) On $|C, 1|_k$ summability factors of Fourier series. **80d:42008**

Secondary classifications:

Hruščëv, S. V. The problem of simultaneous approximation and of removal of the singularities of Cauchy type integrals. (Russian) **(80j:30055)**
Leindler, L. On the strong summability and approximation of Fourier series. **(80k:42002)**
Musielak, Julian An application of the modulus of variation to trigonometric gap series. **(80j:42025)**
Siljusarčuk, V. E. Application of Wiener's theorem on absolutely convergent Fourier series to the study of equations in the space of almost periodic vector sequences. (Russian) **(80a:47043)**

42A32 Trigonometric series of special types (positive coefficients, monotonic coefficients, etc.)

Ansari, S. *See* Khan, R. S., **80j:42020**
Brown, Gavin (*with* Hewitt, Edwin) Some new singular Fourier-Stieltjes series. **80c:42004**
Hewitt, Edwin *See* Brown, Gavin, **80c:42004**
Khan, R. S. (*with* Ansari, S.) Integrability of trigonometric series. **80j:42020**
Ram, Babu On integral modulus of continuity of Fourier series. **80d:42009**

Secondary classifications:

Geĭt, V. È. The absolute convergence of Fourier series. (Russian) **(80e:42007)**
Kahane, Jean-Pierre (*with* Katznelson, Yitzhak) Mauvaise approximation par polynômes trigonométriques dans certaines algèbres de convolution. (English summary) **(80k:42004)**
Katznelson, Yitzhak *See* Kahane, Jean-Pierre, **(80k:42004)**

42A38 Fourier and Fourier-Stieltjes transforms and other transforms of Fourier type

Efimov, A. V. (*with* Zolotareva, S. Ju.) Multiplicative Fourier integral and some of its applications. (Russian) **80a:42009**
Okubo, Hikaru On generalized Fourier-Stieltjes transforms. **80j:42021**
Semenčuk, N. P. Some ordering relations for the approximation of functions representable by Fourier integrals, using normal Zygmund means. (Russian. English summary) **80j:42022**
Soley A., Javier The discrete Fourier transform as an approximation of the continuous Fourier transform. (Spanish. English summary) **80m:42017**
Wilson, F. J. Ideal inversion formulae for the Fourier transform. **80c:42005**
Young, Robert M. On a completeness theorem of Paley and Wiener. **80h:42007**
Zolotareva, S. Ju. *See* Efimov, A. V., **80a:42009**

Secondary classifications:

Corsini, Paolo (*with* Frosini, Graziano) Properties of the multidimensional generalized discrete Fourier transform. **(80m:94007)**
Flensted-Jensen, Mogens (*with* Koornwinder, Tom H.) Jacobi functions: the addition formula and the positivity of the dual convolution structure. **(80j:33015)**
Frosini, Graziano *See* Corsini, Paolo, **(80m:94007)**
Henrici, Peter Barycentric formulas for interpolating trigonometric polynomials and their conjugates. **(80m:65009)**
Koornwinder, Tom H. *See* Flensted-Jensen, Mogens, **(80j:33015)**
Lyttkens, S. A Tauberian theorem with rapidly decreasing remainder. **(80j:40009)**
McClure, J. P. (*with* Wong, R.) Explicit error terms for asymptotic expansions of Stieltjes transforms. **(80a:44003)**
Prestini, E. On the phase problem for space curves. (Italian summary) **(80k:53103)**
Riedel, Roland Asymptotische Darstellung verallgemeinerter Fourierintegrale. I. **(80a:41032)**
Szeptycki, Paweł Domains of integral transformations on general measure spaces. **(80h:47058)**
V"ndev, Dimit"r L. A proof of the Lévy-Hinčin formula via the Bochner and the Kreĭn-Mil'man theorems. (Russian) **(80b:60036)**
Wolfe, Stephen James On the behavior of characteristic functions of the real line. **(80a:60020)**
Wong, R. *See* McClure, J. P., **(80a:44003)**

42A45 Multipliers

Gaudry, Garth I. Littlewood-Paley theorems for sum and difference sets. **80b:42004**
Goes, Günther Multiplier representations of sequence spaces with applications to Lipschitz spaces and spaces of functions of generalized bounded variation. **80a:42010**
de Guzmán, Miguel Besicovitch theory of linearly measurable sets and Fourier analysis. **80j:42023**
Young, Wo Sang Weighted norm inequalities for multipliers. **80m:42018**

Secondary classifications:

Coupet, Bernard Calcul symbolique sur les algèbres de Banach des multiplicateurs de $\mathcal{H}^1(\mathbf{T})$ et $\mathcal{H}^1(\mathbf{R})$. (English summary) **(80b:43006)**
Peller, V. V. Estimates of operator polynomials in symmetric spaces. A functional calculus for absolute contractions. (Russian) **(80j:47047)**

42A50 Conjugate functions, conjugate series, singular integrals

Berzymowski, Andrzej On certain iterated singular integrals. **80g:42010**
Coifman, Ronald (*with* Meyer, Yves) Le théorème de Calderón par les "méthodes de variable réelle". (English summary) **80j:42024**
Kokilashvili, V. M. Singular integrals of the type of Calderón integrals. (Russian) **80m:42019**
Krupnik, N. Ja. Some corollaries of a theorem of Hunt, Muckenhoupt and Wheeden. (Russian) **80a:42011**
Martinjuk, V. T. Some questions of the approximation of functions in the Hausdorff metric. (Russian) **80b:42005**
Meyer, Yves *See* **Coifman, Ronald, 80j:42024**

Secondary classifications:

Kanno, Kôsi On the absolute Nörlund summability factors of a Fourier series and its conjugate series at a point. **(80d:42006)**
Prestini, E. On the phase problem for space curves. (Italian summary) **(80k:53103)**
Sarason, Donald ★Function theory on the unit circle. **(80d:30035)**

42A55 Lacunary series of trigonometric and other functions; Riesz products

Musielak, Julian An application of the modulus of variation to trigonometric gap series. **80j:42025**

Secondary classifications:

Berkes, István On the central limit theorem for lacunary trigonometric series. (Russian summary) **(80c:60032)**
(*with* Philipp, Walter) An a.s. invariance principle for lacunary series $f(n_k x)$. **(80i:60042)**
A central limit theorem for trigonometric series with small gaps. **(80f:60025)**
Kaufman, Robert P. (*with* Philipp, Walter) A uniform law of the iterated logarithm for classes of functions. **(80a:60034)**
Philipp, Walter *See* **Kaufman, Robert P., (80a:60034)** *and* **Berkes, István, (80i:60042)**
Ritter, Gunter Unendliche Produkte unkorrelierter Funktionen auf kompakten, abelschen Gruppen. **(80a:43001)**
On dichotomy of Riesz products. **(80b:43001)**
Teljakovskiĭ, S. A. On integrability of lacunary trigonometric series with weight. **(80d:42005)**

42A61 Probabilistic methods

42A63 Uniqueness of trigonometric expansions, uniqueness of Fourier expansions, Riemann theory, localization

42A65 Completeness of sets of functions

Čanturija, Z. A. Unconditional orthogonal bases of the L_p space. (Russian. Georgian and English summaries) **80f:42009**
Kuz'mina, A. L. Completeness of the system $\{x^{\alpha_k}\}_{k=1}^{\infty}$ in $L_2([-1, 1])$. (Russian) **80f:42010**
Mamedov, N. E. The minimality of multiply complete systems of functions. (Russian. Azerbaijani and English summaries) **80f:42011**
Sodleckiĭ, A. M. The difference of the excesses of two systems of exponential functions. (Russian) **80j:42026**

Secondary classifications:

Kahane, Jean-Pierre (*with* Katznelson, Yitzhak) Mauvaise approximation par polynômes trigonométriques dans certaines algèbres de convolution. (English summary) **(80k:42004)**
Katznelson, Yitzhak *See* **Kahane, Jean-Pierre, (80k:42004)**

42A70 Trigonometric moment problems

Secondary classifications:

Barbieri, Bruno On a theorem of functional analysis. (Italian. English summary) **(80g:44013)**
Morelli, Andreina The theorem of Lerch for the interval $(-\infty, \infty)$. (Italian. English summary) **(80g:44014)**

42A75 Classical almost periodic functions, mean periodic functions [See also 43A60.]

Levitan, B. M. (*with* Žikov, V. V.) ★Почти-периодические функции и дифференциальные уравнения. (Russian) [Almost-periodic functions and differential equations] **80d:42010**
Manfredi, Bianca Asperiodicity and asquasiperiodicity. (Italian. English summary) **80j:42027**
Žikov, V. V. *See* **Levitan, B. M., 80d:42010**

Secondary classifications:

Ljubarskiĭ, M. G. Approximation of Levitan almost-periodic functions by Bohr almost-periodic functions. (Russian) **(80d:43007)**
Margenstern, Maurice On a variant of constructivisation of the theory of almost periodic functions. **(80b:03101)**

42A82 Positive definite functions

Secondary classifications:

Thornett, M. L. A class of second-order stationary random measures. **(80k:60070)**

42A85 Convolution, factorization

Senderovich, Rivka On convexity preserving operators. **80b:42006**

42A99 None of the above, but in this section

Baraket, Richard The distribution of values of trigonometric sums with linearly independent frequencies: Kac's problem revisited. **80a:42012**

42Bxx Fourier analysis in several variables

42B05 Fourier series and coefficients

Abobadze, T. I. Functions of a bounded generalized second variation. (Russian) **80j:42028**
Albrycht, J. (*with* Perz, Fr.) On uniform convergence of multiple Fourier series. **80g:42011**
Bain, M. (*with* Delves, L. M.; Mead, K. O.) On the rate of convergence of multidimensional orthogonal expansions. **80g:42012**
Beliaskiĭ, È. S. Some properties of hyperbolic partial sums of Fourier series and integrals. (Russian. English summary) **80k:42016**
Bloianskiĭ, I. L. Generalized almost everywhere localization and the convergence of double Fourier series. (Russian) **80h:42008**
Delves, L. M. *See* **Bain, M.; et al., 80g:42012**
Finci, Kalmi Asymptotic behavior of the Riesz mean of multiple Fourier series. (Serbo-Croatian. French summary) **80k:42017**
Galić, Mihailo The asymptotic behavior of Riesz and G_δ^*-means of spherical partial sums of multiple Fourier series. (Serbo-Croatian. English summary) **80c:42006**
The D-summability of two series associated with the problem of the summability of the spherically summed multiple Fourier series. (Serbo-Croatian. English summary) **80i:42008**
Φ and G_δ^* summability of multiple Fourier series associated with the behavior of spherical means of higher order. (Serbo-Croatian. English summary) **80i:42009**
Gogoladze, L. D. (*with* Zerekidze, T. Š.) Conjugate functions of several variables. (Russian. Georgian and English summaries) **80m:42020**
Golubov, B. I. On Gibbs' phenomenon for Riesz spherical means of multiple Fourier integrals and Fourier series. (Russian summary) **80f:42012**
Heiberg, Charles H. Limits of norms of powers of absolutely convergent Fourier series in several variables. **80j:42029**
Fourier series with bounded convolution powers. **80m:42021**
Judin, V. A. Lower bound of the Lebesgue constants. (Russian) **80i:42010**
Kojima, Michitaka On the almost everywhere convergence of lacunary spherical partial sums of multiple Fourier series. **80g:42013**
Lekiašvili, M. M. Conjugate functions of several variables. (Russian. Georgian and English summaries) **80m:42022**
Markiewicz, Teresa Approximation des fonctions de deux variables par les moyennes de Nörlund des séries doubles de Fourier. **80g:42014**
Mead, K. O. *See* **Bain, M.; et al., 80g:42012**
Nosenko, Ju. L. Approximation properties of the Riesz means of double Fourier series. (Russian) **80c:42007**
Panferov, V. S. On the Luzin-Denjoy theorem for multiple trigonometric series. (Russian) **80j:42030**
Perz, Fr. *See* **Albrycht, J., 80g:42011**
Rempulska, Lucyna On some means of double Fourier series of continuous functions. **80h:42018**
Sjölin, Per Lipschitz continuity of spherical means. **80j:42031**
Stepanec', O. I. Approximation by Fourier sums of continuous functions of two variables. (Russian) **80j:42032**
Temirgaliev, N Remark on the uniform convergence of multiple Fourier series. (Russian) **80m:42023**
Waterman, Daniel Multiple Fourier series of functions of generalized bounded variation. **80i:42011**
Zaderei, P. V. Approximation of conjugate functions by Fejér sums. (Russian. English summary) **80k:42019**
Zerekidze, T. Š. *See* **Gogoladze, L. D., 80m:42020**

Secondary classifications:

Babenko, K. I. The asymptotic behavior of the Dirichlet kernel of spherical means of multiple Fourier series. (Russian) **(80c:10041)**
Łenski, Włodzimierz Strong approximation of functions by the triangular partial sums of double Fourier series. **(80k:42005)**
Travkin, Ju. I. A system of double trigonometric series and its applications to the solution of contact problems in elasticity theory. (Russian) **(80h:73056)**
Trigub, R. M. Linear methods for the summation of simple and multiple Fourier series and their approximate properties. (Russian) **(80j:42016)**

42B10 Fourier and Fourier-Stieltjes transforms and other transforms of Fourier type

Bhise, V. M. (*with* Dighe, Madhavi) Tauberian theorems for a Fourier type integral operator. I. **80f:42014**
Colfman, Ronald (*with* Dahlberg, Björn E. J.) Singular integral characterizations of nonisotropic H^p spaces and the F. and M. Riesz theorem. **80i:42012**
Dahlberg, Björn E. J. *See* **Colfman, Ronald**, **80i:42012**
Dighe, Madhavi *See* **Bhise, V. M.**, **80f:42014**
Komrska, Jiří Symmetry of Fraunhofer diffraction expressed by series expansions of Fourier transform. (German summary) **80k:42020**
Mel'nik, V. I. Multidimensional absolutely convergent Fourier transforms. (Russian) **80m:42024**
Ormerod, Neil A theorem on Fourier transforms of radial functions. **80g:42015**
Samko, S. G. The Fourier transform of the functions $Y_m(x/|x|)/|x|^{n+a}$. (Russian) **80e:42008**
Shivakumar, P. N. (*with* Wong, R.) Asymptotic expansion of multiple Fourier transforms. **80h:42009**
Wong, R. *See* **Shivakumar, P. N.**, **80h:42009**

Secondary classifications:

(de Jager, Eduard M.) *See* **de Roever, J. W.**, **(80h:46058)**
Ponomarenko, S. P. The solution of a class of triple integral equations associated with the integral Hankel transformation. (Russian) **(80c:45008)**
de Roever, J. W. ★Complex Fourier transformation and analytic functionals with unbounded carriers. **(80h:46058)**
Sjölin, Per A relation between Fourier transforms in one and two variables. **(80m:42026)**

42B15 Multipliers

Bagby, Richard J. Riesz potentials and Fourier multipliers. **80j:42033**
Córdoba, Antonio A note on Bochner-Riesz operators. **80m:42025**
De-Michele, Leonede (*with* Inglis, Ian R.) Fourier multipliers vanishing at infinity. **80i:42013**
Inglis, Ian R. *See* **De-Michele, Leonede**, **80i:42013**
Johnson, Raymond Multipliers of H^p spaces. **80f:42015**
Kenig, Carlos E. (*with* Tomas, Peter A.) The weak behavior of spherical means. **80k:42021**
Meĭkov, V. Z. Spherical multipliers. (Russian) **80b:42009**
Oberlin, Daniel M. A multiplier theorem for $H^1(\mathbf{R}^n)$. **80b:42007**
Sjölin, Per A relation between Fourier transforms in one and two variables. **80m:42026**
Sledd, W. T. On multipliers of H^p spaces. **80b:42010**
Stein, Elias M. Some problems in harmonic analysis. **80m:42027**
Tomas, Peter A. *See* **Kenig, Carlos E.**, **80k:42021**

Secondary classifications:

Fournier, John J. F. Extensions of a Fourier multiplier theorem of Paley. II. **(80h:43005)**
Kurtz, Douglas S. Littlewood-Paley and multiplier theorems on weighted L^p spaces. **(80f:42013)**
Nosenko, Ju. L. Approximation properties of the Riesz means of double Fourier series. (Russian) **(80c:42007)**
Oberlin, Daniel M. Two multiplier theorems for $H^1(U^2)$. **(80h:32013)**

42B20 Singular integrals (Calderón-Zygmund, etc.)

Calderón, A.-P. (*with* Zygmund, A.) A note on singular integrals. **80k:42022**
Calderón, Calixto P. Smooth functions and convergence of singular integrals. **80m:42028**
Connett, William C. Singular integrals near L^1. **80i:42014**
Janson, Svante Mean oscillation and commutators of singular integral operators. **80j:42034**
Jones, Peter W. Constructions for BMO($\mathbf{R}$) and $A_p(\mathbf{R}^n)$. **80h:42010**
Stein, Elias M. (*with* Wainger, Stephen) Problems in harmonic analysis related to curvature. **80k:42023**
Wainger, Stephen *See* **Stein, Elias M.**, **80k:42023**
Zygmund, A. *See* **Calderón, A.-P.**, **80k:42022**

Secondary classifications:

Bordin, Benjamin Weakly strongly singular integral operators in atomic Hardy spaces. (Portuguese) **(80g:42016)**
Calderón, Calixto P. Lacunary spherical means. **(80m:42029)**
Colfman, Ronald (*with* Dahlberg, Björn E. J.) Singular integral characterizations of nonisotropic H^p spaces and the F. and M. Riesz theorem. **(80i:42012)**
Corsini, Paolo (*with* Frosini, Graziano) Properties of the multidimensional generalized discrete Fourier transform. **(80m:94007)**
Dahlberg, Björn E. J. *See* **Colfman, Ronald**, **(80i:42012)**
Divarieĭvili, A. G. Boundary properties of a two-dimensional integral of Cauchy type. (Russian) **(80h:44004)**
Frosini, Graziano *See* **Corsini, Paolo**, **(80m:94007)**
Goodman, Roe Singular integral operators on nilpotent Lie groups. **(80j:43007)**
Muckenhoupt, Benjamin Weighted norm inequalities for classical operators. **(80i:42015)**
Musielak, Julian An application of modular spaces to approximation. **(80f:41024)**
Stepanov, V. D. Convolution integral operators. (Russian) **(80c:47042)**

42B25 Maximal functions, Littlewood-Paley theory

Calderón, Calixto P. Lacunary spherical means. **80m:42029**
Córdoba, Antonio Maximal functions: a proof of a conjecture of A. Zygmund. **80b:42008**
Koosis, Paul Sommabilité de la fonction maximale et appartenance à H_1. Cas de plusieurs variables. (English summary) **80b:42011**
Kurtz, Douglas S. Littlewood-Paley and multiplier theorems on weighted L^p spaces. **80f:42013**
Muckenhoupt, Benjamin Weighted norm inequalities for classical operators. **80i:42015**

Secondary classifications:

Brossard, Jean Comportement "non-tangentiel" et comportement "brownien" des fonctions harmoniques dans un demi-espace. Démonstration probabiliste d'un théorème de Calderon et Stein. **(80j:31010)**
Córdoba, Antonio A note on Bochner-Riesz operators. **(80m:42025)**
Torchinsky, Alberto Restrictions and extensions of potentials of H^p distributions. **(80h:46047)**
Uchiyama, Akihito Weight functions on probability spaces. **(80b:60066)**

42B30 H^p-spaces

Bordin, Benjamin Weakly strongly singular integral operators in atomic Hardy spaces. (Portuguese) **80g:42016**
Muckenhoupt, Benjamin (*with* Wheeden, Richard L.) On the dual of weighted H^1 of the half-space. **80k:42024**
Wheeden, Richard L. *See* **Muckenhoupt, Benjamin**, **80k:42024**

Secondary classifications:

de Bartolomeis, Paolo "Hardy-like" estimates for the $\bar\partial$-operator and scripture theorems for functions in $\mathcal{H}^p$ in strictly pseudoconvex domains. (Italian summary) **(80j:32004)**
Chang, Sun Yung A. Structure of some subalgebra of L^∞ of the torus. **(80k:32005)**
Carleson measure on the bi-disc. **(80j:32009)**
Détraz, Jacqueline Restriction à la diagonale des classes de Hardy du bidisque. (English summary) **(80a:32006)**
Garnett, John B. (*with* Jones, Peter W.) The distance in BMO to L^∞. **(80h:46037)**
(*with* Latter, Robert H.) The atomic decomposition for Hardy spaces in several complex variables. **(80j:32011)**
Goldberg, David Local Hardy spaces. **(80i:30055)**
A local version of real Hardy spaces. **(80h:46052)**
Gundy, R. F. (*with* Stein, Elias M.) H^p theory for the poly-disc. **(80j:32012)**
Jones, Peter W. *See* **Garnett, John B.**, **(80h:46037)**
Koosis, Paul Sommabilité de la fonction maximale et appartenance à H_1. Cas de plusieurs variables. (English summary) **(80b:42011)**
Latter, Robert H. *See* **Garnett, John B.**, **(80j:32011)**
Muckenhoupt, Benjamin Weighted norm inequalities for classical operators. **(80i:42015)**
Peetre, Jaak Two observations on a theorem by Coifman. **(80j:46047)**
Stein, Elias M. *See* **Gundy, R. F.**, **(80j:32012)**
Torchinsky, Alberto Restrictions and extensions of potentials of H^p distributions. **(80h:46047)**

42B99 None of the above, but in this section

Golubov, B. I. Abel-Poisson type summation methods for multiple Fourier integrals. (Russian) **80g:42017**
Hudaĭnazarov, S. H. A representation of functions of two variables by sums of convergent series of special type. (Russian) **80h:42011**
Musaev, B. I. (*with* Salaev, V. V.) Conjugate functions of several variables. I. (Russian) **80j:42035**
Salaev, V. V. *See* **Musaev, B. I.**, **80j:42035**

Secondary classifications:

Brossard, Jean Comportement des fonctions biharmoniques là où l'intégrale d'aire est finie. (English summary) **(80d:32013)**
Colfman, Ronald (*with* Meyer, Yves) Commutateurs d'intégrales singulières et opérateurs multilinéaires. (English summary) **(80a:47076)**
Meyer, Yves *See* **Colfman, Ronald**, **(80a:47076)**

42Cxx Nontrigonometric Fourier analysis

42C05 Orthogonal functions and polynomials, general theory [See also 33A65.]

Abilov, V. A. A note on a theorem of Lorentz. (Russian) **80j:42036**
Barnett, Stephen *See* **Maroulas, John**, **80m:42030**
Dehesa, Jesús S. *See* **Nevai, Paul G.**, **80m:42031**
Endl, Kurt On the involutory property of Laguerre polynomials. **80j:42037**
Freud, Géza On uniform boundedness of orthonormal polynomial sequences. **80f:42016**
Geronimus, Ja. L. The order of growth of polynomials that are associated with Pollaczek polynomials. (Russian) **80c:42008**

Kazarjan, K. S. The multiplicative completion of certain systems. (Russian. Armenian and English summaries) **80j:42038**
Leindler, L. Remarks to a theorem of W. Orlicz. **80f:42017**
Lempert, L. Recursion for orthogonal polynomials on complex domains. **80j:42039**
Logan, B. F. Note on construction of weight functions. **80f:42019**
Maroulas, John (*with* Barnett, Stephen) Further results on the qualitative theory of generalized polynomials. **80m:42030**
Nevai, Paul G. Orthogonal polynomials. **80k:42025**
An asymptotic formula for the derivatives of orthogonal polynomials. **80j:42040**
(*with* Dehesa, Jesús S.) On asymptotic average properties of zeros of orthogonal polynomials. **80m:42031**
Orthogonal polynomials defined by a recurrence relation. **80d:42011**
Distribution of zeros of orthogonal polynomials. **80j:42041**
Price, Thomas E., Jr. Orthogonal polynomials for nonclassical weight functions. **80j:42042**
Sánchez-Dehesa, Jesus Zeros of orthogonal polynomials related to birth-death processes. **80c:42009**
Schwinn, Hans Summierbarkeit von Orthogonalreihen durch Euler-Verfahren und Linearkombinationen von Euler-Verfahren. **80k:42026**
Tandori, Károly Bemerkung zu einem Satz von W. Orlicz. **80f:42018**
Timan, M. F. A property of orthonormal systems that satisfy the S. M. Nikol'skiĭ inequality. (Russian) **80h:42012**

Secondary classifications:

Butzer, P. L. (*with* Stens, R. L.; Wehrens, M.) Saturation classes of the Cesàro and Abel-Poisson means of Fourier-Legendre series. **(80h:41012)**
Dehesa, Jesús S. The asymptotic behaviour of zeros of orthogonal polynomials. **(80f:33017)**
Singh, S. N. *See* **Srivastava, A. N., (80k:33017)**
Srivastava, A. N. (*with* Singh, S. N.) On the Konhauser polynomials $Y_n^\alpha(x;k)$. **(80k:33017)**
Stens, R. L. *See* **Butzer, P. L.; et al., (80h:41012)**
Wehrens, M. *See* **Butzer, P. L.; et al., (80h:41012)**

42C10 Fourier series in special orthogonal functions (Legendre polynomials, Walsh functions, etc.)

Badkov, V. M. Mean and almost everywhere convergence of Fourier series in orthogonal trigonometric polynomials. (Russian) **80c:42009**
Bahlecjan, A. V. The structure of certain classes of centered systems. (Russian. Armenian and English summaries) **80m:42032**
Balarstanova, A. S. Summation of subsequences of partial sums of Fourier series according to the Walsh system. (Russian) **80i:42016**
Beohar, B. K. (*with* Sharma, Sushil) On the absolute Cesàro summability of ultraspherical series. **80k:42027**
Bočkarev, S. V. The method of averaging in the theory of orthogonal series and some questions in the theory of bases. (Russian) **80j:42043**
Choudhary, R. S. Localisation relating to the summability $|C, 1|$ of Fourier-Jacobi series. (Hindi. English summary) **80d:42012**
Ciesielski, Zbigniew (*with* Kwapień, S.) Some properties of the Haar, Walsh-Paley, Franklin and the bounded polygonal orthonormal bases in L_p spaces. **80m:42033**
Görlich, E. (*with* Markett, C.) Mean Cesàro summability and operator norms for Laguerre expansions. **80k:42029**
Gosselin, John A. On the convergence of Walsh-Fourier series for $L^2(0, 1)$. **80m:42034**
On the Littlewood-Paley theory for mixed norm spaces. **80j:42044**
Han, Joung Yi *See* **Shih, Yen P'ing, 80j:42045**
Karagaeva, T. A. A Frobenius theorem for summation with the aid of Bessel polynomials. (Bulgarian. Russian and English summaries) **80g:42018**
Kwapień, S. *See* **Ciesielski, Zbigniew, 80m:42033**
Markett, C. *See* **Görlich, E., 80k:42029**
Rafal'son, S. Z. Fourier-Legendre series with nonnegative coefficients. (Russian) **80m:42035**
Sharma, K. G. (*with* Shrivastava, K. K.) $|C, 1|$ summability of ultraspherical series. (Hindi. English summary) **80m:42036**
Sharma, Sushil *See* **Beohar, B. K., 80k:42027**
Shih, Yen P'ing (*with* Han, Joung Yi) Double Walsh series solution of first-order partial differential equations. **80j:42045**
Shrivastava, K. K. *See* **Sharma, K. G., 80m:42036**
Singh, Tikam A note on absolute summability of Laguerre series. (Hindi. English summary) **80h:42013**
Skopina, M. A. On the problem of convergence factors. (Russian. English summary) **80g:42019**
Skvorcov, V. A. (*with* Wade, W. R.) Generalization of some results concerning Walsh series and the dyadic derivative. (Russian summary) **80i:42017**
Tevzadze, V. I. Uniform convergence of Fourier-Walsh series. (Russian. Georgian and English summaries) **80g:42020**
Ul'janov, P. L. Absolute convergence of Fourier-Haar series for superpositions of functions. (Russian. English summary) **80b:42012**
Wade, W. R. *See* **Skvorcov, V. A., 80i:42017**
Yadav, Sarjoo Prasad On $|C,1|$-summability of ultraspherical series. **80k:42028**

Secondary classifications:

Butzer, P. L. (*with* Splettstösser, W.) Sampling principle for duration-limited signals and dyadic Walsh analysis. **(80i:94001)**
Chen, Wen Liang (*with* Shih, Yen P'ing) Shift Walsh matrix and delay-differential equations. **(80d:34096)**
Efimov, A. V. (*with* Zolotareva, S. Ju.) Multiplicative Fourier integral and some of its applications. (Russian) **(80a:42009)**
Krall, Allan M. Laguerre polynomial expansions in indefinite inner product spaces. **(80m:33020)**
Kunz, Henry O. On the equivalence between one-dimensional discrete Walsh-Hadamard and multidimensional discrete Fourier transforms. **(80g:94029)**
Kuś, Stanisław On the connection between approximation in the space $L^2(-i\infty, i\infty)$ and interpolation. **(80g:41004)**
Móricz, Ferenc On the maximum of the partial sums for double orthogonal series. **(80k:42031)**
Ohanesian, Michael K. *See* **Srihari, Sargur N., (80g:94113)**
Ôhashi, Katsuhiro A note on the functional central limit theorem for lacunary Walsh series. **(80f:60035)**
Prasad, Rajendra (*with* Saxena, Ashok K.) On the Nörlund summability of Fourier-Jacobi series. **(80k:42014)**
Saxena, Ashok K. *See* **Prasad, Rajendra, (80k:42014)**
Schipp, F. On a generalization of the martingale maximal theorem. **(80k:60066)**
Shih, Yen P'ing *See* **Chen, Wen Liang, (80d:34096)**
Singh, Tikam Corrigendum to: "On absolute summability factors of Fourier-Hermite series" [Bull. Calcutta Math. Soc. **68** (1976), no. 2, 125–130; MR **57** #3734]. **(80m:42013)**
Splettstösser, W. *See* **Butzer, P. L., (80i:94001)**
Srihari, Sargur N. (*with* Ohanesian, Michael K.) An efficient algorithm for determining Hadamard sequency vectors. **(80g:94113)**
Zolotareva, S. Ju. *See* **Efimov, A. V., (80a:42009)**

42C15 Series of general orthogonal functions, generalized Fourier expansions, nonorthogonal expansions

Badkov, V. M. Approximate properties of Fourier series in orthogonal polynomials. (Russian) **80c:42010**
Hsiang, Fu Cheng On the absolute convergence factors of an orthogonal series. **80f:42020**
Kuś, Stanisław On the completeness of certain systems of functions in the spaces $L^2(0, \infty)$ and $L^2(-i\infty, i\infty)$. **80k:42030**
Mazhar, S. M. A generalization of Riesz-Fischer theorem. **80j:42046**
Móricz, Ferenc On the maximum of the partial sums for double orthogonal series. **80k:42031**
Ovsepjan, R. I. The empty set as an M-set in a class of general orthonormal systems. (Russian. Armenian and English summaries) **80c:42010**
Pandžakidze, Š. P. The convergence of multiple orthogonal series. (Russian. Georgian and English summaries) **80c:42011**
Simon, P. On the convergence of Vilenkin-Fourier series. **80f:42021**
Zisa, O. A. Application of summability methods of the class (φ, λ) to orthogonal series. (Russian) **80d:42013**

Secondary classifications:

Il'in, V. A. (*with* Joó, István) Estimation of the difference of partial sums of expansions, corresponding to two arbitrary nonnegative selfadjoint extensions of two operators of Sturm-Liouville type, for an absolutely continuous function. (Russian) **(80m:34019)**
Joó, István *See* **Il'in, V. A., (80m:34019)**
Tandori, Károly Bemerkung zu einem Satz von G. Alexits und A. Sharma. **(80k:40002)**

42C20 Rearrangements and other transformations of Fourier and other orthogonal series

Konovalova, T. R. Geometric properties of generalized trigonometric functions. (Russian) **80b:42013**
Kratz, W. (*with* Trautner, R.) On the summability of function series. **80c:42012**
Mulegjan, G. M. Coefficients of everywhere convergent series in certain representations of orthonormal systems. (Russian) **80b:42014**
The coefficients of everywhere convergent series with respect to the Haar system with permuted terms. (Russian. Armenian and English summaries) **80j:42047**
Trautner, R. *See* **Kratz, W., 80c:42012**

Secondary classifications:

Feraique, X. Continuité et théorème central limite pour les transformées de Fourier des mesures aléatoires du second ordre. **(80c:60038)**
Marcus, Michael B. Continuity and the central limit theorem for random trigonometric series. **(80c:60037)**

42C25 Uniqueness and localization for orthogonal series

Colzani, Leonardo Sets of uniqueness of l_p for general orthonormal complete systems. (Italian summary) **80m:42037**

42C30 Completeness of sets of functions

Sedleckiĭ, A. M. On completeness of the systems $\{\exp(ix(n+ih_n))\}$. (Russian summary) **80g:42021**

42C99 None of the above, but in this section

Beohar, B. K. (*with* Jadiya, Banshi Lal) Absolute Cesàro summability of Laguerre expansion. (Hindi. English summary) **80g:42022**
Jadiya, Banshi Lal *See* **Beohar, B. K., 80g:42022**
Móricz, Ferenc Asymptotic behavior of series in weakly multiplicative systems. (Russian) **80c:42013**
Schipp, F. On L^p-norm convergence and almost everywhere convergence of expansions with respect to a product system of some systems. (Russian) **80g:42023**

Secondary classifications:

Butz, Arthur R. FFT length in digital filtering. **(80k:94008)**

43–XX ABSTRACT HARMONIC ANALYSIS {For other analysis on topological and Lie groups, see 22Exx.}

43–01 Elementary exposition, textbooks

Dieudonné, Jean ★Grundzüge der modernen Analysis. Vol. 5/6. **80f:43001**

Secondary classifications:

Page, Warren ★Topological uniform structures. **(80c:46001)**

43–02 Advanced exposition (research surveys, monographs, etc.)

43–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Mackey, George W. Harmonic analysis as the exploitation of symmetry—a historical survey. **(80j:01019)**

43–04 Explicit machine computation and programs (not the theory of computation or programming)

43–06 Proceedings, conferences, etc.

Secondary classifications:

(Heyer, Herbert) *See* **Probability measures on groups, (80d:60005)**
(Rivière, Nestor M.) *See* **Harmonic analysis in Euclidean spaces, (80f:42001a)** *and* **Harmonic analysis in Euclidean spaces, (80f:42001b)**
(Wainger, Stephen) *See* **Harmonic analysis in Euclidean spaces, (80f:42001a)** *and* **Harmonic analysis in Euclidean spaces, (80f:42001b)**
(Weiss, Guido) *See* **Harmonic analysis in Euclidean spaces, (80f:42001a)** *and* **Harmonic analysis in Euclidean spaces, (80f:42001b)**
Conference:
Probability Measures on Groups *See* **Probability measures on groups, (80d:60005)**
Euclidean spaces *See* **Harmonic analysis in Euclidean spaces, (80f:42001a)** *and* **Harmonic analysis in Euclidean spaces, (80f:42001b)**
Groups *See* **Probability measures on groups, (80d:60005)**
Harmonic analysis in Euclidean spaces ★Harmonic analysis in Euclidean spaces. Part 1. **(80f:42001a)**
★Harmonic analysis in Euclidean spaces. Part 2. **(80f:42001b)**
Oberwolfach *See* **Probability measures on groups, (80d:60005)**
Probability measures on groups ★Probability measures on groups. **(80d:60005)**
Proceedings of Symposia in Pure Mathematics *See* **Harmonic analysis in Euclidean spaces, (80f:42001a)** *and* **Harmonic analysis in Euclidean spaces, (80f:42001b)**
Symposium:
Harmonic Analysis in Euclidean Spaces *See* **Harmonic analysis in Euclidean spaces, (80f:42001a)** *and* **Harmonic analysis in Euclidean spaces, (80f:42001b)**
Williamstown, Mass. *See* **Harmonic analysis in Euclidean spaces, (80f:42001a)** *and* **Harmonic analysis in Euclidean spaces, (80f:42001b)**

43A05 Measures on groups, semigroups, etc.

Butković, Davor On the summability of convolution sequences of measures. (Serbo-Croatian summary) **80d:43001**
Chow, H. L. A note on nilpotent measures. **80e:43001**
Duflo, Michel Représentations de semi-groupes de mesures sur un groupe localement compact. (English summary) **80e:43002**
Dzinotyiweyi, Heneri A. M. (*with* Sleijpen, Gérard L. G.) A note on measures on foundation semigroups with weakly compact orbits. **80f:43002**
Hauenschild, Wilfried Zentrale idempotente Masse auf lokalkompakten Gruppen mit abelschem Normalteiler von endlichem Index. (English summary) **80f:43001**
Izuchi, Keiji Convolution powers of singular-symmetric measures. **80g:43001**
Kinzl, Franz Faltungen von Wahrscheinlichkeitsmassen auf diskreten Halbgruppen. **80d:43002**
Gleichverteilung auf diskreten Halbgruppen. (English summary) **80j:43001**
Körner, T. W. A Rudin-Shapiro type theorem. **80e:43003**
Maxones, Walter (*with* Rindler, Harald) Asymptotisch gleichverteilte Netze von Wahrscheinlichkeitsmassen auf lokalkompakten Gruppen. **80m:43001**
Mirotin, A. R. Invariant measures in a locally compact left group. (Russian. English summary) **80f:43003**
Rindler, Harald *See* **Maxones, Walter, 80m:43001**
Ritter, Gunter Unendliche Produkte unkorrelierter Funktionen auf kompakten, abelschen Gruppen. **80a:43001**
On dichotomy of Riesz products. **80b:43001**
Sleijpen, Gérard L. G. *See* **Dzinotyiweyi, Heneri A. M., 80f:43002**
Talagrand, Michel Barycentres de sous-mesures pathologiques. **80g:43002**

Secondary classifications:

Berg, Christian Hunt convolution kernels which are continuous singular with respect to Haar measure. **(80j:31015)**
Brown, Gavin Integrability of Fourier transforms under an ergodic hypothesis. **(80b:43008)**
Center, Barbara (*with* Mukherjea, Arunava) More on limit theorems for iterates of probability measures on semigroups and groups. **(80h:60016)**
Chow, H. L. Idempotent probability measures on locally compact semigroups. **(80k:60017)**
Crépel, Pierre Grenzwertsätze für abhängige Zufallsvariable und Irrfahrten auf Gruppen. **(80g:60009)**
Drisch, Th. Faltungshalbgruppen sind analytische Funktionen ihrer infinitesimalen Funktionale. (English and French summaries) **(80i:46033)**
Hazod, W. Subordination von Faltungs- und Operatorhalbgruppen. **(80j:60023)**
Heyer, Herbert The embedding of probability measures on a locally compact group. **(80e:60013)**
Semi-groupes de convolution sur un groupe localement compact et applications à la théorie des probabilités. **(80i:60009)**
Mirotin, A. R. (*with* Muhin, V. V.) Invariant measures that extend from a semigroup to the group of its quotients. (Russian) **(80b:28013)**
Mocanu, Constanta A generalization of the invariant of H. Leptin. (Romanian. English summary) **(80i:22014)**
Muhin, V. V. Quasi-invariant measures on stable subsets of locally compact groups. (Russian. English summary) **(80g:28012a)**
Left-invariant measures on open stable subsets of locally compact metrizable groups. (Russian) **(80g:28012b)**
See also **Mirotin, A. R., (80b:28013)**
Mukherjea, Arunava *See* **Center, Barbara, (80h:60016)**
Ng, Kung Fu Invariant measures for compact affine semi-groups. **(80b:28014)**
Rangi, Albert Théorème de la limite centrale sur les groupes nilpotents. **(80j:60035)**
Roth, Jean-Pierre Semi-groupes de mesures matricielles. **(80i:47059)**
Samuélidès, Manuel Mesures de Haar et W^*-couple d'un groupoïde mesuré. (English summary) **(80k:46079)**
Székely, Gábor Algebraic dimension of semigroups with application to invariant measures. **(80i:22008)**
Teleman, Silviu On a theorem of P. Lévy. **(80m:60017)**
Wong, James C. S. On topological analogues of left thick subsets in semigroups. **(80m:43002)**

43A07 Means on groups, semigroups, etc.

Asam, L. *See* **Roelcke, W.; et al., 80c:43001**
Bondar, J. V. *See* **Milnes, P., 80d:43003**
Chou, Ching Locally compact groups which are amenable as discrete groups. **80f:43004**
Dierolf, Peter *See* **Roelcke, W.; et al., 80c:43001**
Dierolf, Susanne *See* **Roelcke, W.; et al., 80c:43001**
Duncan, J. (*with* Namioka, Isaac) Amenability of inverse semigroups and their semigroup algebras. **80a:43002**
Emerson, William R. Characterizations of amenable groups. **80a:43003**
The Hausdorff paradox for general group actions. **80g:43003**
Kharaghani, H. The evolution of bounded linear functionals with application to invariant means. **80e:43004**
Milnes, P. (*with* Bondar, J. V.) A simple proof of a covering property of locally compact groups. **80d:43003**
Moulin-Ollagnier, Jean (*with* Pinchon, Didier) Une nouvelle démonstration du théorème de E. Følner. (English summary) **80a:43004**
Namioka, Isaac *See* **Duncan, J., 80a:43002**
Paterson, Alan L. T. On invariant means which are not inversion invariant. **80f:43005**
Pinchon, Didier *See* **Moulin-Ollagnier, Jean, 80a:43004**
Roelcke, W. (*with* Asam, L.; Dierolf, Susanne; Dierolf, Peter) Discontinuous translation-invariant linear forms on $\mathcal{K}(G)$. **80c:43001**
Rubio de Francia, José L. Nets of subgroups in locally compact groups. **80c:43002**
Sherman, Jon A new characterization of amenable groups. **80k:43001**
Talagrand, Michel Géométrie des simplexes de moyennes invariantes. **80k:43002**
Wong, James C. S. On topological analogues of left thick subsets in semigroups. **80m:43002**
Secondary classifications:

Burckel, R. B. Averaging a representation over a subgroup. **(80m:22005)**
Goldberg, Seymour (*with* Irwin, Paul) Weakly almost periodic vector-valued functions. **(80c:43010)**
Irwin, Paul *See* **Goldberg, Seymour, (80c:43010)**
Margulis, G. A. Factor groups of discrete subgroups and measure theory. (Russian) **(80k:22005)**
Finiteness of quotient groups of discrete subgroups. (Russian) **(80k:22006)**

43A10 Measure algebras on groups, semigroups, etc.

Brown, Gavin (*with* Moran, William) Analytic discs in the maximal ideal space of $M(G)$. **80b:43002a**
Dzinotyiweyi, Heneri A. M. Multiplier semigroups and weakly almost periodic measures on foundation semigroups. **80f:43006**
Host, Bernard (*with* Parreau, François) Sur un problème de I. Glicksberg: les idéaux fermés de type fini de $M(G)$. (English summary) **80b:43003**
Igari, Satoru (*with* Kanjin, Yûichi) Homomorphisms of measure algebras on the unit circle. **80i:43002**
Izuchi, Keiji On symmetric measures in measure algebras. (Japanese) **80g:43004**
Kanjin, Yûichi *See* **Igari, Satoru, 80i:43002**
Moran, William *See* **Brown, Gavin, 80b:43002a**
Parreau, François *See* **Host, Bernard, 80b:43003**
Rogozin, B. A. (*with* Sgibnev, M. S.) Maximal ideals in Banach algebras of measures on the line. (Russian) **80a:43005**
(*with* Sgibnev, M. S.) Banach algebras of absolutely continuous measures on the line. (Russian) **80f:43007**
Saeki, Sadahiro (*with* Sato, Enji) Critical points and point derivations on $M(G)$. **80b:43002b**
Sato, Enji *See* **Saeki, Sadahiro, 80b:43002b**
Sgibnev, M. S. *See* **Rogozin, B. A., 80a:43005** *and* **Rogozin, B. A., 80f:43007**
Sleijpen, Gérard L. G. L-multipliers for foundation semigroups with identity element. **80k:43003**

Secondary classifications:

Fujita, Masayuki Banach algebra structure in Fourier spaces and generalization of harmonic analysis on locally compact groups. **(80j:46106)**
Ma, Jan Ch'ang Covariance algebras of operator-valued measures. **(80b:46076)**
Vrem, Richard C. Lacunarity on compact hypergroups. **(80g:43014)**

43A15 L^p-spaces and other function spaces on groups, semigroups, etc.

Belley, Jean-Marc (*with* Dubois, J.) A characterization of linear transformations on the space of Fourier-Stieltjes transforms. **80k:43004**
Benke, George Smoothness and absolute convergence of Fourier series in compact totally disconnected groups. **80f:43008**
Bund, Iracema M. Closed invariant subspaces of a Birnbaum-Orlicz space. **80h:43001**
Chao, J. A. Conjugate characterizations of H^1 dyadic martingales. **80h:43002**
Crombez, G. A characterization of compact groups. **80i:43003**
Dubois, J. *See* **Belley, Jean-Marc, 80k:43004**
Feichtinger, Hans G. Segal algebras that are not character invariant. **80g:43005**
Banach convolution algebras of functions. II. **80g:43006**
Głowacki, P. On decomposition of pseudomeasures on some subsets of LCA groups. **80i:43005**
Hartmann, Klaus Une caractérisation des algèbres de Beurling. (English summary) **80b:43004**
Huang, Jeng Horng A remark on $A^p(G)$. **80e:43005**
Laird, Philip G. On characterizations of exponential polynomials. **80h:43003**
Losert, Viktor Some properties of groups without the property P_1. **80h:43004**
Ting, Mei Ling (*with* Wang, Huai Ch'üan) Homogeneous Banach spaces of locally integrable functions. **80i:43004**
Wang, Huai Ch'üan *See* **Ting, Mei Ling, 80i:43004**
Yap, Leonard Y. H. On convolution of $L(p, q)$ functions. **80m:43003**
Zafran, Misha On the symbolic calculus in homogeneous Banach algebras. **80g:43007**

Secondary classifications:

Alesina, Alberto (*with* De-Michele, Leonede) Inequalities of Paley type for noncommutative martingales. **(80a:46040)**
Crombez, G. (*with* Govaerts, W.) Weakly compact convolution operators in $L_1(G)$. **(80a:43008)**
De-Michele, Leonede *See* **Alesina, Alberto, (80a:46040)**
Emerson, William R. Characterizations of amenable groups. **(80a:43003)**
Govaerts, W. *See* **Crombez, G., (80a:43008)**
Kaijser, Sten Some results in the metric theory of tensor products. **(80c:46069)**
Lee, E. T. Y. (*with* Sunouchi, Gen-ichirô) On the majorant properties in $L^p(G)$. **(80g:43010)**
Lust-Piquard, F. Propriétés géométriques des sous-espaces invariants par translation de $L^1(G)$ et $C(G)$. **(80h:46024)**
McKennon, Kelly The structure space of the trigonometric polynomials on a compact group. **(80j:22003)**
Sunouchi, Gen-ichirô *See* **Lee, E. T. Y., (80g:43010)**
Volk, Günter Grundfunktionen und verallgemeinerte Funktionen auf topologischen Gruppen. III. **(80g:46035)**

43A17 Analysis on ordered groups, H^p-theory

Fournier, John J. F. Extensions of a Fourier multiplier theorem of Paley. II. **80h:43005**
Nakazi, Takahiko Invariant subspaces and translation invariant cocycles. **80f:43005**
Tanaka, Jun-ichi Some remarks on simply invariant subspaces on compact abelian groups. **80b:43005**

Secondary classifications:

Helson, Henry (*with* Parry, William) Cocycles and spectra. **(80d:28036)**
Mahly, Paul S. Ergodic Hardy spaces and duality. **(80k:46081)**
Parry, William *See* **Helson, Henry, (80d:28036)**

43A20 L^1-algebras on groups, semigroups, etc.

Derighetti, Antoine Some remarks on $L^1(G)$. **80f:43009**
Hauenschild, Wilfried (*with* Kaniuth, Eberhard) The generalized Wiener theorem for groups with finite-dimensional irreducible representations. **80h:43006**
(*with* Kaniuth, Eberhard) Ideal mit beschränkter approximativer Eins in Gruppenalgebren von Moore-Gruppen. (English summary) **80e:43006**
Johnson, David L. A characterization of compact groups. **80d:43004**
Kaniuth, Eberhard (*with* Lasser, Rupert) Zum verallgemeinerten Wienerschen Satz für diskrete nilpotente Gruppen der Klasse 3. **80f:43010**
See also **Hauenschild, Wilfried, 80e:43006** *and* **Hauenschild, Wilfried, 80h:43006**
Kotzmann, E. (*with* Rindler, Harald) Isometrien auf Segal-Algebren. **80a:43006**
Lasser, Rupert *See* **Kaniuth, Eberhard, 80f:43010**
Pogunkte, Detlev Nichtsymmetrische sechsdimensionale Liesche Gruppen. **80f:43006**
Rindler, Harald *See* **Kotzmann, E., 80a:43006**

Secondary classifications:

Barnes, Bruce A. Properties of representations of Banach algebras with approximate identities. **(80g:46045)**
Feichtinger, Hans G. Segal algebras that are not character invariant. **(80g:43005)**
Helberg, Charles H. Fourier series with bounded convolution powers. **(80m:42021)**
Kotzmann, E. (*with* Losert, Viktor; Rindler, Harald) Dense ideals of group algebras. **(80m:22007)**
Losert, Viktor *See* **Kotzmann, E.; et al., (80m:22007)**
Rindler, Harald *See* **Kotzmann, E.; et al., (80m:22007)**
Sinclair, Allan M. Bounded approximate identities, factorization, and a convolution algebra. **(80c:46054)**

43A22 Homomorphisms and multipliers of function spaces on groups, semigroups, etc.

Akinyele, Olusola On a homomorphism between generalized semigroup algebras. **80j:43002**
Burnham, James T. (*with* Goldberg, Richard R.) Weak* and norm convergence with applications to Segal algebras. **80a:43007**
Clerc, Jean-Louis Multipliers on symmetric spaces. **80k:43006**
Coupet, Bernard Calcul symbolique sur les algèbres de Banach des multiplicateurs de $\mathcal{H}^1(\mathbf{T})$ et $\mathcal{H}^1(\mathbf{R})$. (English summary) **80b:43006**
Crombez, G. (*with* Govaerts, W.) Compact convolution operators between $L_p(G)$-spaces. **80k:43007**
(*with* Govaerts, W.) Weakly compact convolution operators in $L_1(G)$. **80a:43008**
De-Michele, Leonede (*with* Mauceri, Giancarlo) L^p multipliers on the Heisenberg group. **80j:43003a**
(*with* Mauceri, Giancarlo) L^p multipliers on the Heisenberg group. **80j:43003b**
Fakhoury, Hicham Sur la factorisation de certains multiplicateurs. (English summary) **80c:43003**
Friedberg, Stephen H. Compact multipliers on Banach algebras. **80f:43011**
Gaudry, Garth I. (*with* Inglis, Ian R.) Weak-strong convolution operators on certain disconnected groups. **80f:43012**
Goldberg, Richard R. *See* **Burnham, James T., 80a:43007**
Govaerts, W. *See* **Crombez, G., 80a:43008** *and* **Crombez, G., 80k:43007**
Inglis, Ian R. Central multipliers which vanish at infinity. **80e:43007**
See also **Gaudry, Garth I., 80f:43012**
Jurgensen, Palle E. T. The automorphisms of convolution algebras of C^∞ functions. **80f:43013**
Kalton, Nigel (*with* Wood, G. V.) Norm-decreasing homomorphisms between ideals of $C(G)$. **80f:43014**
Lau, Anthony To Ming Operators which commute with convolutions on subspaces of $L_\infty(G)$. **80h:43007**
Mauceri, Giancarlo *See* **De-Michele, Leonede, 80j:43003a** *and* **De-Michele, Leonede, 80j:43003b**
Oberlin, Daniel M. Linear mappings continuous in measure. **80b:43007**
Olubummo, A. Unbounded multiplier operators. **80m:43004**
Parthasarathy, K. (*with* Tewari, U. B.) Isometric multipliers of Segal algebras. **80g:43008**
Quek, T. S. (*with* Yap, Leonard Y. H.) Multipliers from $L_1(G)$ to a Lipschitz space. **80g:43009**
Tewari, U. B. *See* **Parthasarathy, K., 80g:43008**
Wood, G. V. *See* **Kalton, Nigel, 80f:43014**
Yap, Leonard Y. H. *See* **Quek, T. S., 80g:43009**
Zappa, Anna The center of an algebra of operators. **80d:43005**

Secondary classifications:

Adewoye, T. O. An approximation theorem for semigroups of operators. (Italian summary) **(80m:47036)**
Crombez, G. A characterization of compact groups. **(80i:43003)**
De-Michele, Leonede (*with* Inglis, Ian R.) Fourier multipliers vanishing at infinity. **(80i:42013)**
Inglis, Ian R. *See* **De-Michele, Leonede, (80i:42013)**
Lust-Piquard, F. Propriétés géométriques des sous-espaces invariants par translation de $L^1(G)$ et $C(G)$. **(80h:46024)**
Woodcock, C. F. Convolutions on the ring of p-adic integers. **(80k:12027)**

43A25 Fourier and Fourier-Stieltjes transforms on locally compact abelian groups

Brown, Gavin Integrability of Fourier transforms under an ergodic hypothesis. **80b:43008**
Dressler, Robert E. (*with* Pigno, Louis) Interpolation of Fourier transforms on sums of Fibonacci numbers. **80a:43009**
Embrechts, Paul Erratum to: "On a theorem of E. Lukacs" [Proc. Amer. Math. Soc. **68** (1978), no. 3, 292–294; MR **57** #10364]. **80k:43008**
Lambov, D. L. (*with* Tonev, Toma V.) Some function-algebraic properties of the algebra of generalized analytic functions. (Russian) **80d:43006**
Lee, E. T. Y. (*with* Sunouchi, Gen-ichirô) On the majorant properties in $L^p(G)$. **80g:43010**
McGehee, O. Carruth Lipschitz classes and restrictions of Fourier transforms. **80c:43004**
Moran, William The individual symbolic calculus for measures. II. **80e:43008**
Pigno, Louis *See* **Dressler, Robert E., 80a:43009**
Reiter, H. Über den Satz von Weil-Cartier. (English summary) **80f:43015**
Sunouchi, Gen-ichirô *See* **Lee, E. T. Y., 80g:43010**
Tonev, Toma V. *See* **Lambov, D. L., 80d:43006**

Secondary classifications:

Agranovskiĭ, M. L. Fourier transformation on $SL_2(\mathbf{R})$ and Morera-type theorems. (Russian) **(80j:22014)**
Duggal, B. P. Functional equations and linear transformations. IIIB. Factorization. **(80g:44003a)**
Addendum to: "Functional equations and linear transformations. IIIB. Factorization" (Period. Math. Hungar. **10** (1979), no. 2-3, 177–187). **(80g:44003b)**
Fresnel, Jean (*with* de Mathan, Bernard) Algèbres L^1 p-adiques. (English summary) **(80d:12014)**
Gardner, Patrick (*with* Pigno, Louis) The two sides of a Fourier-Stieltjes transform. **(80f:43017)**

Host, Bernard (*with* Parreau, François) Ensembles de Rajchman et ensembles de continuité. (English summary) **(80e:43009)**
Huang, Jeng Horng A remark on $A^p(G)$. **(80e:43005)**
Long, Rui Lin The weighted large sieve inequalities on locally compact abelian groups. **(80f:10057)**
de Mathan, Bernard *See* **Fresnel, Jean, (80d:12014)**
Parreau, François *See* **Host, Bernard, (80e:43009)**
Pigno, Louis *See* **Gardner, Patrick, (80f:43017)**

43A30 Fourier and Fourier-Stieltjes transforms on nonabelian groups and on semigroups, etc.

Bljumin, S. L. Convolution systems associated with compact nonabelian groups. **80h:43008**
Chou, Ching Uniform closures of Fourier-Stieltjes algebras. **80l:43007**
Cowling, Michael (*with* Rodway, Paul) Restrictions of certain function spaces to closed subgroups of locally compact groups. **80l:43008**
Leinert, Michael Abschätzung von Normen gewisser Matrizen und eine Anwendung. **80j:43004**
Rodway, Paul *See* **Cowling, Michael, 80l:43008**

Secondary classifications:

Howe, Roger E. (*with* Moore, Calvin C.) Asymptotic properties of unitary representations. **(80g:22017)**
Moore, Calvin C. *See* **Howe, Roger E., (80g:22017)**

43A32 Other transforms and operators of Fourier type

43A35 Positive definite functions on groups, semigroups, etc.

De-Michele, Leonede (*with* Mauceri, Giancarlo) On the Fourier-Stieltjes algebra of Euclidean motion groups. **80m:43005**
Henrichs, Rolf Wim On characters of subgroups. **80l:43009**
Mauceri, Giancarlo *See* **De-Michele, Leonede, 80m:43005**
Ressel, Paul Positive definite functions on abelian semigroups without zero. **80m:43006**
Tonev, Tonu V. Positive-definite functions on discrete commutative semigroups. **80h:43009**

Secondary classifications:

Belley, Jean-Marc (*with* Dubois, J.) A characterization of linear transformations on the space of Fourier-Stieltjes transforms. **80k:43004**
Dubois, J. *See* **Belley, Jean-Marc, (80k:43004)**
Haagerup, Uffe An example of a nonnuclear C^*-algebra, which has the metric approximation property. **(80j:46094)**
Sitaram, Alladi Positive definite distributions on $K\backslash G/K$. **(80g:43017)**

43A40 Character groups and dual objects

De Cannière, Jean (*with* Enock, Michel; Schwartz, Jean-Marie) Algèbres de Fourier associées à une algèbre de Kac. **80k:43009**
Enock, Michel *See* **De Cannière, Jean; et al., 80k:43009**
Schwartz, Jean-Marie *See* **De Cannière, Jean; et al., 80k:43009**

43A45 Spectral synthesis on groups, semigroups, etc.

Chieh, Wan Ch'ên Uniform extensions and synthesizability. **80f:43016**
Chilana, Ajit Kaur (*with* Kumar, Ajay) Spectral synthesis in Segal algebras on hypergroups. **80g:43011**
(*with* Kumar, Ajay) Ultra-strong Ditkin sets in hypergroups. **80g:43012**
Kumar, Ajay *See* **Chilana, Ajit Kaur, 80g:43011** *and* **Chilana, Ajit Kaur, 80g:43012**

Secondary classifications:

Glowacki, P. On decomposition of pseudomeasures on some subsets of LCA groups. **(80h:43005)**
Hauenschild, Wilfried (*with* Kaniuth, Eberhard) The generalized Wiener theorem for groups with finite-dimensional irreducible representations. **(80h:43006)**
(*with* Kaniuth, Eberhard) Ideal mit beschränkter approximativer Eins in Gruppenalgebren von Moore-Gruppen. (English summary) **(80e:43006)**
Hey, H. J. (*with* Ludwig, J.) Der Satz von Helson-Reiter für spezielle nilpotente Lie-Gruppen. **(80d:22012)**
Kaniuth, Eberhard (*with* Lasser, Rupert) Zum verallgemeinerten Wienerschen Satz für diskrete nilpotente Gruppen der Klasse 3. **(80f:43010)**
See also **Hauenschild, Wilfried, (80e:43006)** *and* **Hauenschild, Wilfried, (80h:43006)**
Lasser, Rupert *See* **Kaniuth, Eberhard, (80f:43010)**
Ludwig, J. *See* **Hey, H. J., (80d:22012)**

43A46 Special sets (thin sets, Kronecker sets, Helson sets, Ditkin sets, Sidon sets, etc.)

Chojnacki, Wojciech On projections of $L^\infty(G)$ onto translation-invariant subspaces. **80b:43009**
De-Michele, Leonede Some remarks on sets of uniform convergence. **80l:43010**
Dooley, A. H. Norms of characters and lacunarity for compact Lie groups. **80l:43011**
Figà-Talamanca, Alessandro Lacunary sets in noncommutative groups. (Italian. English summary) **80g:43013**
Gardner, Patrick (*with* Pigno, Louis) The two sides of a Fourier-Stieltjes transform. **80f:43017**
Host, Bernard (*with* Parreau, François) Ensembles de Rajchman et ensembles de continuité. (English summary) **80e:43009**
Kitada, Toshiyuki Lacunary sets of symmetric pairs. **80m:43007**
Mossaheb, Shahkar A note on Fourier transforms. **80f:43018**
Parreau, François *See* **Host, Bernard, 80e:43009**
Pigno, Louis *See* **Gardner, Patrick, 80f:43017**
Pisier, Gilles Ensembles de Sidon et espaces de cotype 2. **80b:43010**
Queffélec, Hervé Sur les ensembles de type S_{p_q}. (English summary) **80m:43008**
Vrem, Richard C. Lacunarity on compact hypergroups. **80g:43014**

Secondary classifications:

Körner, T. W. A Rudin-Shapiro type theorem. **(80e:43003)**
McGehee, O. Carruth Lipschitz classes and restrictions of Fourier transforms. **(80c:43004)**
Pisier, Gilles Sur l'espace de Banach des séries de Fourier aléatoires presque sûrement continues. **(80j:60054)**

43A50 Convergence of Fourier series and of inverse transforms

Secondary classifications:

Benke, George Smoothness and absolute convergence of Fourier series in compact totally disconnected groups. **(80f:43008)**
Trigonometric approximation theory in compact totally disconnected groups. **(80a:41034)**

43A55 Summability methods on groups, semigroups, etc. [See also 40J05.]

43A60 Almost periodic functions on groups and semigroups and their generalizations (recurrent functions, distal functions, etc.); almost automorphic functions

Goldberg, Seymour (*with* Irwin, Paul) Weakly almost periodic vector-valued functions. **80e:43010**
Irwin, Paul *See* **Goldberg, Seymour, 80e:43010**
Lau, Anthony To Ming Uniformly continuous functionals on the Fourier algebra of any locally compact group. **80m:43009**
Ljubarskiĭ, M. G. Approximation of Levitan almost-periodic functions by Bohr almost-periodic functions. (Russian) **80d:43007**

Secondary classifications:

Berglund, J. F. (*with* Junghenn, H. D.; Milnes, P.) ★Compact right topological semigroups and generalizations of almost periodicity. **(80c:22003)**
Cowling, Michael (*with* Rodway, Paul) Restrictions of certain function spaces to closed subgroups of locally compact groups. **(80l:43008)**
Crombez, G. (*with* Govaerts, W.) Weakly compact convolution operators in $L_1(G)$. **(80a:43008)**
Govaerts, W. *See* **Crombez, G., (80a:43008)**
Heyer, Herbert Semi-groupes de convolution sur un groupe localement compact et applications à la théorie des probabilités. **(80l:60009)**
Huang, Ter Jenq A characterization of maximally almost periodic groups. **(80h:22001)**
Junghenn, H. D. Almost periodic functions on semidirect products of transformation semigroups. **(80l:54048)**
See also **Berglund, J. F.; et al., (80c:22003)**
Milnes, P. *See* **Berglund, J. F.; et al., (80c:22003)**
Rodway, Paul *See* **Cowling, Michael, (80l:43008)**

43A65 Representations of groups, semigroups, etc. [See also 22Dxx.]

Skudlarek, Hans-Ludwig On a two-sided version of Reiter's condition and weak containment. **80h:43010**

Secondary classifications:

Parthasarathy, Kalyanapuram Rangachari Infinitely divisible distributions in SL(k, C) or SL(k, R) may be imbedded in dyadic convolution semigroups. **(80k:60014)**

43A70 Analysis on specific locally compact abelian groups [See also 12A85.]

Daly, James E. Singular integral multipliers on local fields. **80j:43005**
Onneweer, C. W. Differentiation of fractional order on p-groups, approximation properties. (Russian summary) **80m:43010**
On the definition of dyadic differentiation. **80m:43011**
Fractional differentiation and Lipschitz spaces on local fields. **80m:43012**
Phillips, Keith Extendibility of convolution operators and convergence of Fourier series on local fields; integral homogeneity of distributions. **80j:43006**

Secondary classifications:

Woodcock, C. F. Parseval's formula and p-adic interpolation. **(80k:12026)**
Convolutions on the ring of p-adic integers. **(80k:12027)**

43A75 Analysis on specific compact groups

Dreseler, Bernd Lebesgue constants for certain partial sums of Fourier series on compact Lie groups. **80a:43010**
Onneweer, C. W. Sets of divergence in the group of integers of a p-adic or p-series field. **80f:43019**

Secondary classifications:

Onneweer, C. W. On the definition of dyadic differentiation. **(80m:43011)**

43A77 Analysis on general compact groups

43A80 Analysis on other specific Lie groups [See also 22E30.]

Arthur, James G. Harmonic analysis of invariant distributions. **80g:43015**

Secondary classifications:

Auslander, L. (*with* Tolimieri, R.) Algebraic structures for $\oplus\Sigma_{n>1}L^2(Z/n)$ compatible with the finite Fourier transform. **(80b:22012)**
De-Michele, Leonede (*with* Mauceri, Giancarlo) L^p multipliers on the Heisenberg group. **(80j:43003a)**
(*with* Mauceri, Giancarlo) L^p multipliers on the Heisenberg group. **(80j:43003b)**
Falkowski, B. J. First order cocycles for $SL(2, \mathbf{C})$. **(80g:22009)**
Geller, Daryl Fourier analysis on the Heisenberg group. **(80g:22011)**
Goodman, Roe Holomorphic representations of nilpotent Lie groups. **(80d:22011)**
Howe, Roger E. (*with* Moore, Calvin C.) Asymptotic properties of unitary representations. **(80g:22017)**
Inglis, Ian R. Central multipliers which vanish at infinity. **(80e:43007)**
Mauceri, Giancarlo *See* **De-Michele, Leonede, (80j:43003a)** *and* **De-Michele, Leonede, (80j:43003b)**
Moore, Calvin C. *See* **Howe, Roger E., (80g:22017)**
Tolimieri, R. *See* **Auslander, L., (80b:22012)**

43A85 Analysis on homogeneous spaces

Adimurthi (*with* Kumaresan, S.) On the singular support of distributions and Fourier transforms on symmetric spaces. **80k:43010**
Dadok, Jiri Paley-Wiener theorem for singular support of K-finite distributions on symmetric spaces. **80k:43011**
Goodman, Roe Singular integral operators on nilpotent Lie groups. **80j:43007**
Korányi, Adam A survey of harmonic functions on symmetric spaces. **80k:43012**
Kumaresan, S. *See* **Adimurthi, 80k:43010**
Lévy-Bruhl-Laperrière, Anne Spectre du de Rham Hodge sur l'espace projectif complexe. **80g:43016**
Lewis, John B. Eigenfunctions on symmetric spaces with distribution-valued boundary forms. **80f:43020**
Lohoué, Noël Some estimates on symmetric spaces related to the Laplace-Beltrami operator. **80j:43008**
Rossmann, Wulf Analysis on real hyperbolic spaces. **80a:43011**
Analysis on real hyperbolic spaces. **80f:43021**
Sitaram, Alladi Positive definite distributions on $K\backslash G/K$. **80g:43017**
Stanton, Robert J. (*with* Tomas, Peter A.) Pointwise inversion of the spherical transform on $L^p(G/K)$, $1 \leqslant p < 2$. **80e:43011**
Tomas, Peter A. *See* **Stanton, Robert J., 80e:43011**

Secondary classifications:

Amar, Éric (*with* Bonami, Aline) Mesures de Carleson d'ordre α et solutions au bord de l'équation $\bar{\partial}$. (English summary) **(80h:32032)**
Bonami, Aline *See* **Amar, Éric, (80h:32032)**
Ch'ên, Wu Yung Remarks on H^p spaces over bounded symmetric domains. **(80d:32031)**
Chen, Y. W. Solution of the wave equation in $\mathbf{R}^{n+1}$ with data on a characteristic cone. **(80a:35066)**
Clerc, Jean-Louis Multipliers on symmetric spaces. **(80k:43006)**
Eymard, Pierre Le noyau de Poisson et la théorie des groupes. **(80b:22014)**
Gel'fand, I. M. (*with* Gindikin, S. G.; Šapiro, Z. Ja.) A local problem of integral geometry in a space of curves. (Russian) **(80k:53100)**
Gindikin, S. G. *See* **Gel'fand, I. M.; et al., (80k:53100)**
(Helgason, Sigurdur) *See* **Lacroix, Jean, (80j:22008)**
Howe, Roger E. On some results of Strichartz and Rallis and Schiffman. **(80f:22014)**
Johnson, Kenneth D. Differential equations and the Bergman-Šilov boundary on the Siegel upper half plane. **(80d:32032)**
Kolk, Johan Antoon Casper ★The Selberg trace formula and asymptotic behaviour of spectra. **(80a:22017)**
Lacroix, Jean Représentation des fonctions propres sur un espace symétrique (d'après Helgason). **(80j:22008)**
Lassalle, Michel Séries de Laurent des fonctions holomorphes dans la complexification d'un espace symétrique compact. **(80f:22006)**
Peters, James V. Analytic multipliers of the Radon transform. **(80a:44004)**
Saka, Kôichi A generalization of Cauchy-Riemann equations on a Riemannian symmetric space and the H^p space theory. **(80k:32007)**
Šapiro, Z. Ja. *See* **Gel'fand, I. M.; et al., (80k:53100)**
Widom, Harold Eigenvalue distribution theorems for certain homogeneous spaces. **(80h:58054)**
Zlotan, Israel Bernard Some characterizations of the n-dimensional Peano derivative. **(80j:26009)**

43A90 Spherical functions [See also 22E45, 22E46.]

Dieudonné, Jean Spherical functions and special functions. **80m:43013**
Flensted-Jensen, Mogens Spherical functions of a real semisimple Lie group. A method of reduction to the complex case. **80f:43022**

Secondary classifications:

(Helgason, Sigurdur) *See* **Lacroix, Jean, (80j:22008)**

Lacroix, Jean Représentation des fonctions propres sur un espace symétrique (d'après Helgason). **(80j:22008)**

43A95 Categorical methods [See also 18–XX, 46Mxx.]

43A99 Miscellaneous topics

Secondary classifications:

Edgar, G. A. (*with* Rosenblatt, J. M.) Difference equations over locally compact abelian groups. **(80l:39001)**
Rosenblatt, J. M. *See* **Edgar, G. A., (80l:39001)**

44–XX INTEGRAL TRANSFORMS, OPERATIONAL CALCULUS {For fractional derivatives and integrals, see 26A33. For numerical methods, see 65R10.}

44–01 Elementary exposition, textbooks

Fetzer, Viktor ★Integral-Transformationen. **80d:44001**
Mullineux, N. (*with* Reed, J. R.) Uses of integral transforms with nonstandard kernels. **80m:44001**
Reed, J. R. *See* **Mullineux, N., 80m:44001**
Wolf, Kurt Bernardo ★Integral transforms in science and engineering. **80d:44002**

44–02 Advanced exposition (research surveys, monographs, etc.)

Secondary classifications:

Bryčkov, Ju. A. (*with* Prudnikov, A. P.; Šišov, V. S.) Operational calculus. (Russian) **(80g:44010)**
Prudnikov, A. P. *See* **Bryčkov, Ju. A.; et al., (80g:44010)**
Šišov, V. S. *See* **Bryčkov, Ju. A.; et al., (80g:44010)**

44–03 Historical (must also be assigned at least one classification number from Section 01)

Debnath, Lokenath Generalized calculus and its applications. **80b:44001**

Secondary classifications:

Golovinskiĭ, I. A. How was the Laplace transform introduced? (Russian) **(80g:01011)**
(Laplace, Pierre Simon) *See* **Golovinskiĭ, I. A., (80g:01011)**

44–04 Explicit machine computation and programs (not the theory of computation or programming)

44–06 Proceedings, conferences, etc.

Secondary classifications:

(Dimovski, Ivan Hr.) *See* **Generalized functions and operational calculus, (80f:46003)**
(Gamkrelidze, R. V.) *See* **Mathematical analysis, (80d:00011)**
Conference:
Generalized Functions and Operational Calculus *See* **Generalized functions and operational calculus, (80f:46003)**
Generalized functions and operational calculus ★Generalized functions and operational calculus. **(80f:46003)**
Itogi Nauki i Tehniki *See* **Mathematical analysis, (80d:00011)**
Mathematical analysis ★Математический анализ. Том 16. (Russian) [Mathematical analysis. Vol. 16] **(80d:00011)**
Operational calculus *See* **Generalized functions and operational calculus, (80f:46003)**
Varna *See* **Generalized functions and operational calculus, (80f:46003)**

44A05 General transforms [See also 42A38.]

Nasim, C. An inversion formula for a class of integral transforms. II. **80m:44002**
Naylor, D. On a nonselfadjoint eigenfunction expansion. **80c:44001**

44A10 Laplace transform

Bellman, Richard E. On the Post-Widder transform. **80c:44002**
Bhonsle, B. R. *See* **Sonavane, K. R., 80l:44002**
Buschman, R. G. Substitution relations for Laplace transformations. **80m:44003**
Integral equations and Laplace transformations. **80k:44001**
Cooper, Jacob Lionel Bakst Transform methods in the solution of differential equations. **80c:44003**
González Domínguez, Alberto (*with* Trione, Susana Elena) On the Laplace transforms of retarded, Lorentz-invariant functions. **80h:44001**
Jagerman, D. L. An inversion technique for the Laplace transform with application to approximation. **80m:44004**
Manandhar, R. P. An inversion theorem for the Laplace inversion operators. **80m:44005**
Mel'nik, V. I. Inverse theorems for transformations of the Laplace transform type. (Russian) **80c:44004**
Pathan, M. A. On finite double sums. (Hindi. English summary) **80e:44001**
Integrals involving Legendre functions. (Hindi. English summary) **80g:44001**
Raina, R. K. On some double Laplace transforms. (Hindi. English summary) **80j:44001**
Rao, G. L. N. Another real inversion theorem for a distributional ${}_1F_1$-transform. **80h:44002**

Singh, M. M. P. A generalized Laplace transform L_λ of a class of generalized functions. **80f:44001**

Sonavane, K. R. (*with* Bhonsle, B. R.) Some operation transform formulae for distributional one sided Laplace transformation. **80f:44002**

Sova, Miroslav The Laplace transform of analytic vector-valued functions (real conditions). (Czech summary) **80h:44003**

The Laplace transform of analytic vector-valued functions (complex conditions). (Czech summary) **80h:44002**

Laplace transform of exponentially Lipschitzian vector-valued functions. (Czech summary) **80m:44006**

Tiwari, A. K. On spaces of type $LH_{\alpha,\beta}$ and their Laplace-Hankel transformations. **80m:44007**

Trione, Susana Elena *See* **González Domínguez, Alberto, 80h:44001**

Verlinia, V. D. On a method of determining the inverse Laplace transformation. (Russian) **80a:44001**

Vlček, Vladimír A note to a certain pair of parametric integrals. (Czech and Russian summaries) **80m:44008**

Vostrý, Zdeněk Polynomial approach to conversion between Laplace and Z transforms. **80a:44002**

Secondary classifications:

Abramovici, Flavian A generalization of the Cagniard method. **(80a:73023)**

Deshpande, V. L. A theorem on Laplace transform and its applications. **(80f:33006)**

Helversen-Pasotto, Anne L'identité de Barnes pour les corps finis. **(80f:10047)**

Kanahara, Yuji Tauberian theorems of exponential type. **(80g:40006)**

Moharir, S. K. (*with* Saxena, Rajendra K.) A new generalization of Tricomi's theorem. **(80h:44007)**

Padva, I. G. *See* **Zevin, A. A., (80f:73026)**

Paiano, G. (*with* Paveri-Fontana, S. L.) An exact method for the evaluation of the S matrix for the Yukawa potential problem. **(80f:81051)**

Pathan, M. A. On finite summations. **(80j:33005)**

Paveri-Fontana, S. L. *See* **Paiano, G., (80f:81051)**

Preuss, Wolfgang Einige Bemerkungen zur Rücktransformation im Zusammenhang mit einem Körper transformierbarer Operatoren. **(80g:44011)**

Saxena, Rajendra K. *See* **Moharir, S. K., (80h:44007)**

Vanler, Jeffrey D. Boundary behavior of Laplace-Stieltjes transforms with applications to uniformly distributed sequences. **(80f:10063)**

Wimp, Jet Computing values of a function on [0, 1] from its moments. **(80f:65020)**

Zevin, A. A. (*with* Padva, I. G.) Inversion of the Laplace transform in problems of hereditary elasticity theory. (Russian. Armenian and English summaries) **(80f:73026)**

44A15 Special transforms (Legendre, Hilbert, etc.)

Blasco Martín, María Francisca Abelian theorems for the generalized Whittaker transform. (Spanish) **80f:44003**

Deans, Stanley R. A unified Radon inversion formula. **80g:44002**

Duggal, B. P. Functional equations and linear transformations. IIIB. Factorization. **80g:44003a**

Addendum to: "Functional equations and linear transformations. IIIB. Factorization" (Period. Math. Hungar. **10** (1979), no. 2-3, 177–187). **80g:44003b**

Divarieliivili, A. G. Boundary properties of a two-dimensional integral of Cauchy type. (Russian) **80h:44004**

Gupta, R. K. (*with* Mishra, S. D.) Infinite Mathieu transform. **80g:44004**

Gupta, S. D. An extension of the finite Mathieu transforms and its applications. I. **80h:44005**

Joshi, C. S. Abelian theorem for a generalized Stieltjes transform. **80j:44002**

Lavoine, Jean (*with* Misra, Om Prakash) Abelian theorems for the distributional Stieltjes transformation. **80f:44001**

(*with* Misra, Om Prakash) Sur la transformation de Stieltjes des distributions et son inversion au moyen de la transformation de Laplace. (English summary) **80m:44009**

Mahajan, R. R. (*with* Saxena, Rajendra K.) On fractional integration and Meijer transform of two variables. **80j:44003**

McBride, Adam C. The Hankel transform of some classes of generalized functions and connections with fractional integration. **80j:44004**

McClure, J. P. (*with* Wong, R.) Explicit error terms for asymptotic expansions of Stieltjes transforms. **80a:44003**

Mikolás, M. On an extension of Fourier's integral theorem. **80j:44005**

Miller, E. L. Convergence properties and an inversion formula for the Lambert transform. (Spanish summary) **80j:44006**

Mishra, S. D. *See* **Gupta, R. K., 80g:44004**

Misra, Om Prakash *See* **Lavoine, Jean, 80f:44001** *and* **Lavoine, Jean, 80m:44009**

Moutaldi, E. On the Radon inversion formula. **80h:44003**

Naylor, D. On an integral transform. **80h:44002**

Nimatov, H. The reconstruction of a function from its integral with respect to a class of families of curves. (Russian) **80g:44005**

Ojha, S. N. Generalized associated Legendre transform. **80k:44004**

Peters, James V. Analytic multipliers of the Radon transform. **80a:44004**

Rooney, P. G. On the range of the Hankel transformation. **80g:44006**

Saxena, Rajendra K. *See* **Mahajan, R. R., 80j:44003**

Solmon, Donald C. A note on k-plane integral transforms. **80m:44010**

Widder, D. V. The Airy transform. **80b:44003**

Wong, R. *See* **McClure, J. P., 80a:44003**

Žakovskiĭ, A. N. Some integral transformations in an elliptic coordinate system. (Russian) **80f:44002**

Secondary classifications:

Bingham, N. H. (*with* Teugels, J. L.) Tauberian theorems and regular variation. **(80g:40006)**

Cheng, M. T. (*with* Shen, Xie Chang; Zhou, Min Qiang; Zhang, Xu Ding) Finite Walsh transform in R^n and applications to picture bandwidth compression. (Chinese. English summary) **(80g:94002)**

Costabel, Martin A singular integral operator related to the one-sided Hilbert transformation. **(80f:47043)**

Decewicz, Grzegorz (*with* Leksiński, Wacław) On some class preserved by a singular integral with a deviated argument. **(80f:30059)**

Duggal, B. P. Near normality of a class of transforms. **(80h:47037)**

Gel'fand, I. M. (*with* Gindikin, S. G.; Šapiro, Z. Ja.) A local problem of integral geometry in a space of curves. (Russian) **(80k:53100)**

Gindikin, S. G. *See* **Gel'fand, I. M.; et al., (80k:53100)**

Guseinov, R. V. Some applications of the Fourier-Wiener transform. I. (Russian) **(80c:46031)**

Igusa, Jun-ichi A remark on zeta functions. **(80b:12011)**

Jones, Peter W. Constructions for BMO(R) and $A_p(R^n)$. **(80k:42010)**

Krätzel, Ekkehard Integral transformations of Bessel-type. **(80m:44015)**

Leksiński, Wacław *See* **Decewicz, Grzegorz, (80f:30059)**

Pathak, Ram Shankar On the Meijer transform of generalized functions. **(80m:46036)**

Ponomarenko, S. P. A system of dual integral equations connected with the Mehler-Fok generalized integral transform. (Russian. English summary) **(80m:45007)**

Rao, G. L. N. The n-dimensional generalized Stieltjes transformation of distributions. **(80g:46038)**

Rooney, P. G. On the ranges of certain fractional integrals. II. **(80f:26006)**

Šapiro, Z. Ja. *See* **Gel'fand, I. M.; et al., (80k:53100)**

Shen, Xie Chang *See* **Cheng, M. T.; et al., (80g:94002)**

Teugels, J. L. *See* **Bingham, N. H., (80g:40006)**

Zhang, Xu Ding *See* **Cheng, M. T.; et al., (80g:94002)**

Zhou, Min Qiang *See* **Cheng, M. T.; et al., (80g:94002)**

44A20 Transforms of special functions

Kalla, S. L. *See* **Villalonga, Patricia M., 80f:44003**

Koranne, V. D. (*with* Saxena, Rajendra K.) Some double integral transformation of the H-function. (Hindi. English summary) **80m:44011**

Maurya, R. P. *See* **Prasad, Y. N., 80m:44012**

Ojha, S. N. On a finite integral transform with q-dimensional Bessel function as kernel. **80g:44007**

Prasad, Y. N. (*with* Maurya, R. P.) On a generalized multiple L-H transform. (Hindi. English summary) **80m:44012**

Saigo, Megumi A remark on integral operators involving the Gauss hypergeometric functions. **80g:44008**

Saxena, Rajendra K. *See* **Koranne, V. D., 80m:44011**

Sharma, S. D. An integral transform involving two generalised H-functions. **80h:44006**

Singhal, B. M. Operational techniques with certain double generalized transform. **80j:44007**

Villalonga, Patricia M. (*with* Kalla, S. L.) On the integral transform whose kernel is the Ω-function of two variables. (Spanish. English summary) **80f:44003**

Secondary classifications:

Bhati, S. S. *See* **Singhal, J. P., (80k:33006)**

Das Gupta, S. R. A note on the H-functions of transfer problems in multiplying media. **(80d:82064)**

Moharir, S. K. (*with* Saxena, Rajendra K.) A new generalization of Tricomi's theorem. **(80h:44007)**

Pandey, J. N. *See* **Pathak, Ram Shankar, (80m:46037)**

Pathak, Ram Shankar (*with* Pandey, J. N.) The G-transform of generalized functions. **(80m:46037)**

Prasad, Y. N. (*with* Singh, S. N.) Some higher operational techniques in the theory of special functions. **(80h:33010)**

Saxena, Rajendra K. *See* **Moharir, S. K., (80h:44007)**

Singh, S. N. *See* **Prasad, Y. N., (80h:33010)**

Singhal, J. P. (*with* Bhati, S. S.) Triple Whittaker transforms of generalised hypergeometric functions. (Hindi. English summary) **(80k:33006)**

Srivastava, H. S. P. Integrals involving generalized Legendre functions and a generalized function of two variables. (Hindi. English summary) **(80j:33009)**

44A30 Multiple transforms

Andrea, Stephen On the support of the Radon transform. **80d:44003**

Gupta, R. K. *See* **Sharma, S. D., 80j:44009**

Maurya, R. P. *See* **Prasad, Y. N., 80j:44008**

Prasad, Y. N. (*with* Maurya, R. P.) Basic properties of the generalized multiple L-H transform. (Hindi. English summary) **80j:44008**

Sharma, S. D. On multiple finite Mathieu transforms. **80m:44013**

(*with* Gupta, R. K.) Multiple finite spheroidal transform and its application. **80j:44009**

Secondary classifications:

Januliauskas, Algimantas Properties of conjugate abscissas of convergence of double Dirichlet series. (Russian. Lithuanian and German summaries) **(80k:32002)**

44A35 Convolution

Černov, V. M. Asymptotic properties of transformation of a convolution type. (Russian) **80h:44007**

Do Tan Si Resolution of Fredholm equations with kernels $K(z-z_0)$ by operational calculus. **80g:44009**

Logan, B. F. Limits in L_p of convolution transforms with kernels $aK(at)$, $a\to 0$. **80f:44004a**

Inequalities and minimum norm kernels for the Hardy class H_p. **80f:44004b**

Secondary classifications:

Dimovski, Ivan Hr. Representation of operators which commute with differentation in an invariant hyperplane. **(80i:47044)**

44A40 Calculus of Mikusiński and other similar operational calculi

de Brucq, Denis *See* **Vasilache, Sergiu, 80h:44010**
Bryčkov, Ju. A. (*with* Prudnikov, A. P.; Šilov, V. S.) Operational calculus. (Russian) **80g:44010**
Dimovski, Ivan Hr. Convolutions of right inverse operators and representation of their multipliers. **80h:44008**
Fényes, Tomás (*with* Kosik, Pál) About some special differential equations of second order of the operator field. (Hungarian) **80k:44005**
Halic, Gheorghe A generalization of asymptotics with the aid of neutrices. (Romanian. French summary) **80f:44005**
Sur un anneau isomorphe avec l'anneau de Mikusiński. **80j:44010**
Komócsi, Sándor (*with* Száz, Árpád) On the multiplier extensions of admissible semitopological vector modules with direct sum decompositions. **80j:44011**
Kosik, Pál *See* **Fényes, Tomás, 80k:44005**
Mambriani, Antonio (*with* Mambriani, Giuseppe) Restricted deralgebra: first step towards a new "functional analysis". I. (Italian) **80j:44012**
Mambriani, Giuseppe *See* **Mambriani, Antonio, 80j:44012**
Nikolić-Despotović, Danica The representation of one exponential function. **80j:44013**
The analysis of a class of exponential operational functions. **80i:44004**
Okamoto, Shôichi A simplified derivation of Mikusiński's operational calculus. **80b:44004**
Preuss, Wolfgang A topology for transformable operators. **80h:44009**
Einige Bemerkungen zur Rücktransformation im Zusammenhang mit einem Körper transformierbarer Operatoren. **80g:44011**
Remarks on the solution of linear s-differential equations in a field of transformable operators. **80j:44014**
Prudnikov, A. P. *See* **Bryčkov, Ju. A.; et al., 80g:44010**
Šilov, V. S. *See* **Bryčkov, Ju. A.; et al., 80g:44010**
Skendžić, Marija On power series in the operator $(s-a)^{\alpha}$. **80g:44012**
Stanković, B. Linear differential equations with coefficients in a field. I. **80k:44006**
Száz, Árpád Traditional transformations of the convolution calculus in an abstract setting. **80m:44014**
See also **Komócsi, Sándor, 80j:44011**
Takači, A. Operator $e^{-\lambda s^{\alpha}}$. **80j:44015**
Vasilache, Sergiu (*with* de Brucq, Denis) Sur un problème aux limites pour l'équation de propagation avec perte d'énergie. (English summary) **80h:44010**

Secondary classifications:

Bittner, R. (*with* Smentek, Z.) Exterior differential forms in operational calculus. **(80k:58001)**
Chatfield, J. A. Solution for an integral equation with continuous interval functions. **(80k:45022)**
Kamen, Edward W. An operator theory of linear functional differential equations. **(80a:34091)**
Przeworska-Rolewicz, Danuta On trigonometric identity for right invertible operators. **(80a:47020)**
A generalization of Wroński theorems. **(80a:47021)**
Romanko, V. K. Operational calculus and the solvability of boundary value problems. (Russian) **(80j:34076)**
Salam, Abdus (*with* Strathdee, J.) Remarks on high-energy stability and renormalizability of gravity theory. **(80a:83008)**
Singh, S. D. *See* **Srivastava, A. N.; et al., (80j:33029)**
Singh, S. N. *See* **Srivastava, A. N.; et al., (80j:33029)**
Smentek, Z. *See* **Bittner, R., (80k:58001)**
Srivastava, A. N. (*with* Singh, S. D.; Singh, S. N.) Operational derivation of generating functions of a generalized function. **(80j:33029)**
Stanković, B. Linear differential equation with coefficients in a ring of Mikusiński operators. **(80a:34006)**
Strathdee, J. *See* **Salam, Abdus, (80a:83008)**
Struble, Raimond A. The Fourier theorem. **(80b:46049)**
Tasche, Manfred Funktionalanalytische Methoden in der Operatorenrechnung. **(80c:47001)**

44A45 Classical operational calculus

Kritzel, Ekkehard Integral transformations of Bessel-type. **80m:44015**
Kul'ko, V. F. The generalization of a formula of operational calculus and its practical application in the computation of electromagnetic fields. (Russian) **80b:44005**
Moharir, S. K. (*with* Saxena, Rajendra K.) A new generalization of Tricomi's theorem. **80k:44007**
Przeworska-Rolewicz, Danuta Operational calculus and algebraic analysis. **80i:44005**
Saxena, Rajendra K. *See* **Moharir, S. K., 80k:44007**

Secondary classifications:

Cooper, Jacob Lionel Bakst Transform methods in the solution of differential equations. **(80c:44003)**

44A55 Discrete operational calculus

Mishra, Ramadhar Application of fractional q-integration to the theory of a generalized q-Stieltjes transform. **80i:44006**
Okamoto, Shôichi A difference approach to Mikusiński's operational calculus. **80c:44005**

44A60 Moment problems

44A99 Miscellaneous topics

Babb, Stanley E., Jr. (*with* Cafky, James W.) Operational evaluation of certain infinite Bessel function integrals. **80e:44002**
Barberis, Bruno On a theorem of functional analysis. (Italian. English summary) **80g:44013**
Cafky, James W. *See* **Babb, Stanley E., Jr., 80e:44002**
Morelli, Andreina The theorem of Lerch for the interval $(-\infty, \infty)$. (Italian. English summary) **80g:44014**

Secondary classifications:

Dubois-Violette, Michel Topics on a noncommutative moment problem. **(80g:46056)**
Korobeĭnik, Ju. F. The problem of moments, of interpolation and of being a basis. (Russian) **(80g:46034)**
Nishimoto, Katsuyuki Fractional differintegration of products. **(80m:26006)**
Fractional differintegration of the logarithmic function. **(80m:26009)**
Schmüdgen, Konrad Positive cones in enveloping algebras. **(80g:17006)**

45–XX INTEGRAL EQUATIONS

45–01 Elementary exposition, textbooks

Čerskiĭ, Ju. I. *See* **Gabov, F. D., 80j:45001**
Gabov, F. D. (*with* Čerskiĭ, Ju. I.) ★Уравнения типа свертки. (Russian) [Equations of convolution type] **80j:45001**

Secondary classifications:

(Andrianov, N. F.) *See* **Parton, V. Z.; et al., (80a:73001)**
Parton, V. Z. (*with* Perlin, P. I.) ★Интегральные уравнения теории упругости. (Russian) [Integral equations in elasticity theory] **(80a:73001)**
Perlin, P. I. *See* **Parton, V. Z., (80a:73001)**
(Šerman, D. I.) *See* **Parton, V. Z.; et al., (80a:73001)**
(Stupak, S. F.) *See* **Parton, V. Z.; et al., (80a:73001)**

45–02 Advanced exposition (research surveys, monographs, etc.)

Secondary classifications:

Schwabik, Štefan (*with* Tvrdý, Milan; Vejvoda, Otto) ★Differential and integral equations. **(80h:34003)**
Tvrdý, Milan *See* **Schwabik, Štefan; et al., (80h:34003)**
Vejvoda, Otto *See* **Schwabik, Štefan; et al., (80h:34003)**

45–03 Historical (must also be assigned at least one classification number from Section 01)

45–04 Explicit machine computation and programs (not the theory of computation or programming)

45–06 Proceedings, conferences, etc.

(Hvedelidze, B. V.) *See* **Singular integrals, integral equations and their applications, 80i:45001**
(Londen, Stig-Olof) *See* **Volterra equations, 80i:45002**
(Staffans, Olof J.) *See* **Volterra equations, 80i:45002**
Integral equations *See* **Singular integrals, integral equations and their applications, 80i:45001** *and* **Volterra equations, 80i:45002**
Otaniemi *See* **Volterra equations, 80i:45002**
Singular integrals, integral equations and their applications ★Сингулярные интегралы, интегральные уравнения и их приложения. (Russian) [Singular integrals, integral equations and their applications] **80i:45001**
Symposium:
Helsinki, Integral Equations *See* **Volterra equations, 80i:45002**
Volterra equations ★Volterra equations. **80i:45002**

Secondary classifications:

(Mamedov, R. G.) *See* **Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)**
Differential equations *See* **Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)**
Studies in some questions of the constructive theory of functions and differential equations ★Исследования по некоторым вопросам конструктивной теории функций и дифференциальных уравнений. (Russian) [Studies in some questions of the constructive theory of functions and differential equations] **(80d:00021)**
Theory of functions *See* **Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)**

45A05 Linear integral equations

Badalov, F. B. (*with* Hužajarov, N. Ju.) A method for solving the integral and integro-differential equations of the hereditary theory of viscoelasticity. (Russian) **80h:45001**

Flak, A. M. (*with* Madych, W. R.) On certain bounded solutions of $g * \mu = f$. **80f:45001**
Huzajarov, N. Ju. *See* **Badalov, F. B., 80h:45001**
Madych, W. R. *See* **Flak, A. M., 80f:45001**

Secondary classifications:

Anikonov, Ju. E. Formulas and inequalities in an inverse kinematic problem. (Russian) **(80j:53015)**
Buschman, R. G. Integral equations and Laplace transformations. **(80k:44001)**

45B05 Fredholm integral equations

Balabaev, V. E. A system of integral equations of Fredholm type. (Russian) **80m:45001**
Barnikov, A. S. Solvability of integral equations of the first kind. (Russian) **80j:45002**
Kagiwada, Harriet (*with* Kalaba, Robert E.) Extension of S. L. Sobolev's initial value method to nonlinear integral equations. **80c:45001**
Kalaba, Robert E. *See* **Kagiwada, Harriet, 80c:45001**
Krueger, Robert J. Some results on linear delay integral equations. **80e:45001**
Raslambekov, S. N. *See* **Rogožin, V. S., 80c:45002**
Rogožin, V. S. (*with* Raslambekov, S. N.) The Noether theory for integral equations of the third kind. (Russian) **80c:45002**
Schneider, Claus Regularity of the solution to a class of weakly singular Fredholm integral equations of the second kind. **80f:45002**
Vasil'ev, V. G. A necessary condition for existence of a special solution of an integral equation of the first kind that satisfies a given constraint. (Russian) **80d:45001**

Secondary classifications:

Aleksandrov, V. M. (*with* Kovalenko, E. V.) Two effective methods of solving mixed linear problems of mechanics of continuous media. **(80m:73005)**
Babolian, E. (*with* Delves, L. M.) An augmented Galerkin method for first kind Fredholm equations. **(80k:65100)**
Casti, John L. On the algebraic classification of Fredholm integral operators. **(80f:47007)**
Černyšev, V. M. A stationary linear integro-differential equation. (Russian) **(80m:45016)**
Das Gupta, S. R. A note on the H-functions of transfer problems in multiplying media. **(80d:82064)**
Delves, L. M. *See* **Babolian, E., (80k:65100)**
Dhawan, G. K. The distribution of stress in the vicinity of an external crack in a semi-infinite solid. **(80j:73007)**
Do Tan Si Resolution of Fredholm equations with kernels $K(z-z_0)$ by operational calculus. **(80g:44009)**
Hassan, Hassan A. Z. Reissner-Sagoci problem for a non-homogeneous large thick plate. (French summary) **(80b:73035)**
Kovalenko, E. V. *See* **Aleksandrov, V. M., (80m:73005)**
Müller, G. O. Zum asymptotischen Verhalten von Volterra- und Fredholmintegralgleichungen. **(80e:45016)**
Vatul'ian, A. O. The action of a rigid punch on an orthotropic layer. (Russian. Armenian and English summaries) **(80i:73067)**

45C05 Eigenvalue problems [See also 34B25, 35Pxx, 45P05.]

Cornille, Henri An inversionlike integral equation in the multidimensional case. **80d:45002**
Reade, J. B. Asymptotic behaviour of eigenvalues of certain integral equations. **80m:45002**
Šaroglazov, V. S. The branching of eigenvalues of a boundary value problem for a class of linear integro-differential equations. (Russian) **80k:45001**

Secondary classifications:

Barry, P. A. (*with* Musgrave, M. J. P.) On elliptical conical refraction of elastic waves in tetragonal media. **(80k:73019)**
Borysiewicz, M. Solution to the critical problem for the neutron transport equation. **(80c:82046)**
Britov, N. A. Points of bifurcation of a system of nonlinear integral equations. (Russian) **(80f:45014)**
Bui, H. D. (*with* Van, K. Dang) Généralisation de la théorie de la rupture de Griffith. (English summary) **(80c:73061)**
Chen, Si Xiong Eigenvalues and eigenfunctions of unstable resonators. (Chinese. English summary) **(80h:82003)**
Das, Rabindra Nath Exact solution of the problem of diffuse reflection and transmission in Rayleigh scattering by use of the Laplace transform and the theory of linear singular operators. **(80b:86006)**
Gazeau, J. P. On the four Euclidean conformal group structure of the Sturmian operator. **(80h:81028)**
Gol'ditein, R. V. Application of integral equations to the numerical solution of problems in elasticity and plasticity theory. (Russian) **(80g:73014)**
Irin, V. A. *See* **Rolov, B. N.; et al., (80j:82011)**
Kalandarišvili, D. G. Eigenvalues of an integro-differential equation with a small parameter. (Russian. Georgian and English summaries) **(80m:45018)**
Kuzovkov, V. N. *See* **Rolov, B. N.; et al., (80j:82011)**
Morrison, J. A. Integral equations for electromagnetic scattering by perfect conductors with two-dimensional geometry. **(80b:78007)**
Musgrave, M. J. P. *See* **Barry, P. A., (80k:73019)**
Rolov, B. N. (*with* Ivin, V. A.; Kuzovkov, V. N.) ★Статистика и кинетика фазовых переходов в твердом теле. (Russian) [Statistics and kinetics of phase transition in a solid] **(80j:82011)**
Van, K. Dang *See* **Bui, H. D., (80c:73061)**
Victory, H. Dean, Jr. On criticality problems in energy dependent neutron transport theory. **(80k:82086)**
Wong, R. Asymptotic expansions of fractional integrals involving logarithms. **(80b:26007)**
Zwahlen, Bruno A minimax principle for the critical value of a boundary value problem with positive and increasing nonlinearity. (German summary) **(80k:34027)**

45D05 Volterra integral equations [See also 34A10.]

Asanov, A. Sufficient conditions for the uniqueness of the solution of the Volterra and Volterra-Uryson equations. (Russian. Russian summary) **80g:45001**
Buhgeim, A. L. Volterra type equations and inverse problems. (Russian) **80k:45002**
Casti, John L. A new representation for Volterra factors and the Fredholm resolvent. **80c:45003**
Ch'ên, Hung I Solutions for certain nonlinear Volterra integral equations. **80f:45003**
Fitzgibbon, W. E. Product integral representation of solutions to semilinear Volterra equations with delay. **80g:45002**
Representation and approximation of solutions to semilinear Volterra equations with delay. **80f:45004**
Grimmer, R. C. (*with* Miller, Richard K.) Well posedness of Volterra integral equations in Hilbert space. **80i:45003**
Gripenberg, Gustaf On the boundedness of solutions of Volterra equations. **80k:45003**
On rapidly decaying resolvents of Volterra equations. **80i:45004**
A Volterra equation with nonintegrable resolvent. **80b:45001**
On an abstract integral equation. **80i:45005**
Hannsgen, Kenneth B. An L^1 remainder theorem for an integrodifferential equation with asymptotically periodic solution. **80b:45002**
Herdman, Terry L. Behavior of maximally defined solutions of a nonlinear Volterra equation. **80a:45001**
Jordan, G. S. A nonlinear singularly perturbed Volterra integro-differential equation of nonconvolution type. **80f:45005**
Kiffe, Thomas (*with* Stecher, Michael) A characterization of the range of a nonlinear Volterra integral operator. **80k:45004**
A discontinuous Volterra integral equation. **80i:45006**
Komlenko, Ju. V. Nonlinear Volterra integral equations with a nonmonotone operator which have positive solutions. (Russian) **80h:45002**
Laird, Philip G. Multidimensional Volterra integral equations of convolution type. **80f:45006**
Lakshmikantham, V. (*with* Vatsala, A. S.; Vaughn, Randy) Existence and comparison results for a class of Volterra integral equations of Sobolev type. **80j:45003**
Levin, J. J. On the asymptotic behavior of solutions of integral equations. **80j:45004**
Magnickiĭ, N. A. Linear Volterra integral equations of the first and third kinds. (Russian) **80k:45005**
Michel, Anthony N. *See* **Miller, Richard K., 80j:45005**
Miller, Richard K. (*with* Michel, Anthony N.) Stability of linear Volterra integro-differential equations of order n. **80j:45005**
See also **Grimmer, R. C., 80i:45003**
Nowicka, Krystyna On the existence of solutions of a certain integral-functional equation. **80a:45002**
Palm, G. On representation and approximation of nonlinear systems. **80m:45003**
Piórek, Józef On integral equations in a Banach space. **80g:45003**
Staffans, Olof J. An asymptotic problem for a positive definite operator-valued Volterra kernel. **80b:45003**
On the asymptotic behavior of finite energy solutions of an abstract integral equation. **80b:45004**
Some energy estimates for a nondifferentiated Volterra equation. **80f:45007**
Stecher, Michael *See* **Kiffe, Thomas, 80k:45004**
Sugiyama, Shohei On functional integral equations. **80g:45004a**
On comparison theorems of functional integral equations. **80g:45004b**
Vatsala, A. S. *See* **Lakshmikantham, V.; et al., 80j:45003**
Vaughn, Randy *See* **Lakshmikantham, V.; et al., 80j:45003**
Ward, James R., Jr. The implicit function theorem and a random integral equation. **80a:45003**
Webb, G. F. Volterra integral equations and nonlinear semigroups. **80b:45005**
Wexler, D. Frequency domain stability for a class of equations arising in reactor dynamics. **80i:45007**

Secondary classifications:

Berger, Marc A. Stochastic integral equations. **(80f:60053)**
Burton, T. A. Stability theory for Volterra equations. **(80f:45016)**
Dale, A. I. On a general random Volterra integral equation. **(80c:60079)**
DeFranco, R. J. Stability results for multiple Volterra integral equations. **(80a:45028)**
Gripenberg, Gustaf An existence result for a nonlinear Volterra integral equation in a Hilbert space. **(80c:45016)**
Kannan, D. Evolution operators and equations of an interacted prey-predator population incorporating historical actions. **(80g:92021)**
Krueger, Robert J. Some results on linear delay integral equations. **(80e:45001)**
Miller, Richard K. Well-posedness of abstract Volterra problems. **(80j:45022)**
Monsion, Michel On analysis of non-linear systems by multidimensional Laguerre transform. (Russian summary) **(80a:93083)**
Müller, G. O. Zum asymptotischen Verhalten von Volterra- und Fredholmintegralgleichungen. **(80e:45016)**
Novruzov, G. M. Investigation of systems of semiexplicit differential equations with Volterra operators. (Russian) **(80m:34001)**
Popov, V. M. Applications of the saturability technique in the problem of stability of nonlinear systems. **(80b:93126)**
Quigg, David L. On an integral equation arising in age-dependent branching processes. **(80a:60107)**
Ramm, A. G. The stability of control systems. (Russian) **(80b:93116)**
Römisch, Werner *See* **Schulze, Reinhard, (80f:60055)**
Schorr, B. The exact solution of the Burbidge-Prendergast integral equation for the mass density in galaxies. **(80k:85005)**

Schulze, Reinhard (*with* Römisch, Werner) Kennwertmethoden für nichtlineare Volterrasche Integralgleichungen in stetigen stochastischen Prozessen. **(80f:60055)**

Smith, Manfred C. On a nonlinear Volterra equation of nonconvolution type. **(80f:45023)**

Sugiyama, Shohei On nonlinear Volterra integral equations with a small parameter. **(80g:45010)**

45Exx Singular integral equations [See also 30E20, 30E25, 44A15, 44A35.]

Secondary classifications:

(Dümmel, Siegfried) *See* **Prößdorf, Siegfried, (80d:47044)**

Prößdorf, Siegfried ★Some classes of singular equations. **(80d:47044)**

45E05 Integral equations with kernels of Cauchy type [See also 35J15.]

Baburin, Ju. S. The singularization of singular integral equations. II. (Russian) **80k:45006a**

The singularization of singular integral equations. III, IV. (Russian) **80k:45006b**

Čibrikova, L. I. (*with* Pleščinskiĭ, N. B.) Integral equations with generalized logarithmic and power kernels. III. (Russian) **80a:45004**

Costabel, Martin A contribution to the theory of singular integral equations with Carleman shift. **80i:45008**

Deundjak, V. M. *See* **Glebov, A. V., 80e:45002**

Dudučava, R. V. Singular integral equations with fixed singularities in the kernel on piecewise smooth lines. (Russian. Georgian and English summaries) **80g:45005**

Some integral equations with singular kernels. (Russian. English and Georgian summaries) **80j:45006**

Džangibekov, G. Study of the solvability of a singular two-dimensional integral equation with complex conjugate unknown function. (Russian. Tajiki summary) **80j:45007**

Glebov, A. V. (*with* Deundjak, V. M.) Homotopy classification of Noetherian systems of singular and bi-singular integral equations with discontinuous coefficients. (Russian) **80e:45002**

Gordadze, Ė. G. Multidimensional singular integrals. (Russian) **80a:45005**

Hubedžašvili, Š. S. *See* **Kubšašvili, M. D., 80i:45010**

Hvedelidze, B. V. The problem of linear conjugacy and of characteristic singular integral equations. (Russian) **80e:45003**

Kazidžanova, D. The Noether property of a two-dimensional singular integral equation on a bounded domain. (Russian. Tajiki summary) **80i:45009**

Kilbas, A. A. (*with* Samko, S. G.) The smoothness of functions that are representable by logarithmic integrals. (Russian) **80g:45006**

Komjak, I. I. A class of two-dimensional singular integral equations with a Bergman kernel. (Russian. English summary) **80f:45008**

Kubšašvili, M. D. (*with* Hubedžašvili, Š. S.) Approximate solution of some singular integral equations in the case of nonclosed contours of integration. (Russian) **80i:45010**

Lifanov, I. K. The Poincaré-Bertrand formula and singular integral equations with multiple integrals of Cauchy type. (Russian) **80b:45006**

Nowicka, D. The solution of a system of singular integral equations with Hadamard integral. (Russian) **80f:45009**

Pleščinskiĭ, N. B. *See* **Čibrikova, L. I., 80a:45004**

Samko, S. G. *See* **Kilbas, A. A., 80g:45006**

Soldatov, A. P. On the theory of singular integral operators of classical type. (Russian) **80j:45008**

Secondary classifications:

Abdullaev, S. K. (*with* Babaev, A. A.) A singular integral with a summable density. (Russian) **80e:47043**

Babaev, A. A. *See* **Abdullaev, S. K., (80e:47043)**

Baĭkarev, P. G. The algebra of singular integral operators with a finite commutative group of shifts on a composite contour. (Russian) **80b:47061**

Chrysakis, A. C. *See* **Theocaris, Pericles S.; et al., (80b:65159)**

Diekmann, Odo (*with* Kaper, Hans G.) On the bounded solutions of a nonlinear convolution equation. **(80c:45015)**

Divarieĭšvili, A. G. Boundary properties of a two-dimensional integral of Cauchy type. (Russian) **(80h:44004)**

Fromme, J. A. (*with* Golberg, Michael A.) Integral equations for flows in wind tunnels. **(80m:76010)**

Gabov, S. A. Applications of angular potential: integral equations for the plane problem with an oblique derivative for harmonic functions. (Russian) **(80i:31001)**

Golberg, Michael A. *See* **Fromme, J. A., (80m:76010)**

Halmuradov, Ė. A singular Cauchy integral weakened by a logarithmic factor. (Russian) **(80k:30039)**

Ioakimidis, Nikolaos I. (*with* Theocaris, Pericles S.) A remark on the numerical evaluation of stress intensity factors by the method of singular integral equations. **(80i:73059)**

See also **Theocaris, Pericles S.; et al., (80b:65159)**

Kaper, Hans G. *See* **Diekmann, Odo, (80c:45015)**

Karlovič, Ju. I. (*with* Kravčenko, V. G.) Integro-functional equations with non-Carleman shift in the space $L_2^*(0, 1)$. (Russian) **(80j:47046)**

Kokilašvili, V. M. (*with* Paatašvili, V. A.) A problem of linear conjugation with measurable coefficients for a class of boundary curves. (Russian. Georgian and English summaries) **(80j:30061)**

Kravčenko, V. G. *See* **Karlovič, Ju. I., (80j:47046)**

Nachman, A. *See* **Walton, J. R.; et al., (80a:73037)**

Nohel, John A. A nonlinear singularly perturbed Volterra functional differential equation. **(80i:45020)**

Paatašvili, V. A. *See* **Kokilašvili, V. M., (80j:30061)**

Pilidi, V. S. (*with* Sazonov, L. I.) Bisingular integral operators in spaces of Hölder functions. (Russian) **(80h:47056)**

Poletaev, G. S. On the theory of abstract analogues of certain equations of convolution type. (Russian) **(80e:47025)**

Roach, G. F. On the commutative properties of boundary integral operators. **(80e:35010)**

Sahnovič, L. A. Equations with a difference kernel on a finite segment. (Russian) **(80g:76017)**

Sazonov, L. I. *See* **Pilidi, V. S., (80h:47056)**

Schapery, R. A. *See* **Walton, J. R.; et al., (80a:73037)**

Sprößig, Wolfgang Analoga zu funktionentheoretischen Sätzen im R^n—Anwendungen auf mehrdimensionale singuläre Integralgleichungen. **(80f:30038)**

Stepanov, V. D. Convolution integral operators. (Russian) **(80c:47042)**

Theocaris, Pericles S. (*with* Chrysakis, A. C.; Ioakimidis, Nikolaos I.) Cauchy-type integrals and integral equations with logarithmic singularities. **(80b:65159)**

See also **Ioakimidis, Nikolaos I., (80i:73059)**

Verbickiĭ, I. Ė. Projection methods for the solution of singular integral equations with piecewise continuous coefficients. (Russian) **(80d:47056)**

Walton, J. R. (*with* Nachman, A.; Schapery, R. A.) The sliding of a rigid indentor over a power-law viscoelastic half-space. **(80a:73037)**

45E10 Integral equations of the convolution type (Abel, Picard, Toeplitz and Wiener-Hopf type) [See also 47B35.]

Conde, S. *See* **Kalla, S. L.; et al., 80m:45004**

Diekmann, Odo On a nonlinear integral equation arising in mathematical epidemiology. **80g:45007**

Kalla, S. L. (*with* Viloria, L.; Conde, S.) On an integral equation associated with a production problem. **80m:45004**

Komjak, I. I. A two-dimensional singular integral equation over a circular domain. (Russian. English summary) **80a:45006**

Makarov, A. A. Correct solvability classes of a general boundary value problem in an infinite layer for systems of linear convolution equations. (Russian) **80m:45005**

Mikaeljan, L. V. Asymptotic behavior of Fredholm determinants for truncated integral operators with matrix kernels depending on the difference of arguments. (Russian. Armenian summary) **80m:45006**

Okrasiński, W. On the existence and uniqueness of nonnegative solutions of a certain nonlinear convolution equation. **80f:45010**

Orton, Marion Distributions and singular integral equations of Carleman type. **80k:45007**

Rali, L. B. The integral equation of image reconstruction. **80c:45004**

Rubin, B. S. (*with* Volodarskaja, G. F.) An imbedding theorem for convolutions on a finite interval and its application to integral equations of the first kind. (Russian) **80j:45009**

Ševčik, V. V. Integral equations of convolution type in a family of spaces of generalized functions that is continuously dependent on a parameter. (Russian) **80k:45007**

Viloria, L. *See* **Kalla, S. L.; et al., 80m:45004**

Volodarskaja, G. F. *See* **Rubin, B. S., 80j:45009**

Williams, Joyce W. Linear integral equations with singular normal kernels of class 1. **80f:45011**

Secondary classifications:

Abdullaev, S. K. A multidimensional singular operator on the one-point compactification of R^m. (Russian) **(80d:47075)**

Dixit, L. A. Inversion of an integral equation with generalized Rice's polynomial as kernel. **(80h:45007)**

Gripenberg, Gustaf A Volterra equation with nonintegrable resolvent. **(80b:45001)**

Heise, U. Condition of a functional equation for the static boundary value problem of plane elastostatics. **(80i:73008)**

Kakičev, V. A. Factorization and γ-factorization of functions belonging to a Wiener ring that are defined on the product of a circle and the compactified real line. (Russian) **(80g:32008)**

Kazantzakis, J. G. (*with* Theocaris, Pericles S.) The evaluation of certain two-dimensional singular integrals used in three-dimensional elasticity. **(80b:73012)**

Kovalenko, E. V. An effective method of solving contact problems for a linear-deformed basis with a thin reinforcing covering. (Russian. English and Armenian summaries) **(80f:73077)**

Poletaev, G. S. On the theory of abstract analogues of certain equations of convolution type. (Russian) **(80e:47025)**

Ševčik, V. V. Equations of convolution type in a scale of spaces of generalized functions. (Russian) **(80k:46045)**

Staffans, Olof J. On the asymptotic spectrum of a convolution. **(80i:45025)**

Theocaris, Pericles S. *See* **Kazantzakis, J. G., (80b:73012)**

45E99 None of the above, but in this section

Bulgakov, A. I. (*with* Ljapin, L. N.) Some properties of the set of solutions of a Volterra-Hammerstein integral inclusion. (Russian) **80a:45007**

Kiffe, Thomas (*with* Stecher, Michael) L^2 solutions of Volterra integral equations. **80c:45005**

Ljapin, L. N. *See* **Bulgakov, A. I., 80a:45007**

Mandelbrojt, S. Quelques nouvelles considérations sur les itérés des noyaux singuliers symétriques. (Russian summary) **80a:45008**

Popov, Ju. V. (*with* Popova, A. M.) Analytic solution of an integral equation of Fredholm type. (Russian) **80a:45009**

Popova, A. M. *See* **Popov, Ju. V., 80a:45009**

Rodino, Luigi Systems of polysingular equations. **80i:45011**

Stecher, Michael *See* **Kiffe, Thomas, 80c:45005**

Williams, W. E. Note on a singular integral equation. **80a:45010**

Secondary classifications:

Das, Rabindra Nath Exact solution of a problem in radiative transfer by the Laplace transform and the Wiener-Hopf technique when the incoming intensity at the surface is known. **(80g:85003)**
Fikioris, John G. *See* **Kanellopoulos, John D., (80h:78011)**
Kakičev, V. A. A generalized Riemann operator with several projectors. (Russian) **(80a:47080)**
Kanellopoulos, John D. (*with* Fikioris, John G.) Resonant frequencies in an electromagnetic eccentric spherical cavity. **(80h:78011)**
Kecs, Wilhelm On models of one-dimensional linear viscoelastic solids. **(80e:73034)**
Kozak, A. V. (*with* Simonenko, I. B.) Projection methods for the solution of two-dimensional singular equations on a torus. (Russian) **(80f:47021)**
Placus, Joel D. Symmetric singular integral operators with arbitrary deficiency. **(80f:45034)**
Rigolot, Christiane Potentiel élastique sur une surface non régulière. (English summary) **(80a:73021)**
Simonenko, I. B. *See* **Kozak, A. V., (80f:47021)**

45Fxx Systems of linear integral equations

45F05 Systems of nonsingular linear integral equations

Babeiko, V. A. (*with* Veksler, V. E.) Certain systems of integral equations of the first kind that are encountered in elasticity theory and in mathematical physics. (Russian. Armenian and English summaries) **80b:45008**
Kordzadze, R. A. Infinite systems of integral equations. (Russian) **80c:45006**
A class of infinite systems of linear integral equations. (Russian. Georgian and English summaries) **80g:45008**
The reduction method for homogeneous infinite systems of linear integral equations of Fredholm type. (Russian) **80c:45007**
Veksler, V. E. *See* **Babeiko, V. A., 80b:45008**

Secondary classifications:

Rodino, Luigi Systems of polysingular equations. **(80i:45011)**

45F10 Dual, triple, etc., integral and series equations

Choudhary, Arati *See* **Srivastava, K. N.; et al., 80b:45004**
Clements, D. L. *See* **Love, E. R., 80a:45012**
Dwivedi, A. P. (*with* Trivedi, T. N.) Triple series equations involving Jacobi and Laguerre polynomials. **80b:45009**
(*with* Singh, V. B.) A formal solution of simultaneous triple integral equations involving H-function of n variables $H(x_n)$. **80h:45003**
(*with* Sharma, J. P.) Formal solution of simultaneous dual integral equations involving H-function of n variables. **80i:45012**
(*with* Singh, V. B.) Simultaneous triple integral equations associated with H-function. **80a:45011**
(*with* Sharma, J. P.) Simultaneous triple integral equations involving H-functions. **80f:45012**
Ivanov, E. A. The solution of some dual integral equations of wave diffraction theory. (Russian) **80f:45013**
Lee, Doo Sung Triple series equations involving Jacobi polynomials. (Korean summary) **80i:45013**
Love, E. R. (*with* Clements, D. L.) Erratum: "A transformation of Cooke's treatment of some triple integral equations" (J. Austral. Math. Soc. Ser. B **19** (1975/76), no. 3, 259–288). **80a:45012**
Palaiya, R. M. *See* **Srivastava, K. N.; et al., 80b:45004**
Pathak, Ram Shankar Formal solution of dual integral equations involving H-functions. **80a:45013**
On a class of dual integral equations. **80b:45010**
Dual series equations involving heat polynomials. **80h:45008**
Ponomarenko, S. P. The solution of a class of triple integral equations associated with the integral Hankel transformation. (Russian) **80c:45008**
A system of dual integral equations connected with the Mehler-Fok generalized integral transform. (Russian. English summary) **80m:45007**
Solution of one kind for systems of dual integral equations. (Russian. English summary) **80m:45008**
Sharma, J. P. *See* **Dwivedi, A. P., 80f:45012** *and* **Dwivedi, A. P., 80i:45012**
Singh, V. B. *See* **Dwivedi, A. P., 80a:45011** *and* **Dwivedi, A. P., 80h:45003**
Srivastava, Hari M. (*with* Srivastava, Rekha) A certain class of dual equations involving series of Jacobi and Laguerre polynomials. **80c:45009**
Srivastava, K. N. (*with* Palaiya, R. M.; Choudhary, Arati) Solution of certain simultaneous multiple integral equations involving inverse Mellin transforms. **80h:45004**
Srivastava, Rekha *See* **Srivastava, Hari M., 80c:45009**
Travkin, Ju. I. A system of dual integral equations with trigonometric kernels. (Russian) **80a:45014**
Trivedi, T. N. *See* **Dwivedi, A. P., 80b:45009**

Secondary classifications:

Lal, Mange Axisymmetric mixed boundary value problem of a circular hole in an elastic solid. **(80j:73008)**

45F15 Systems of singular linear integral equations

Hurd, R. A. A note on the solvability of simultaneous Wiener-Hopf equations. (French summary) **80b:45011**
Huy Duong Bui (*with* Putot, Claude) Formulation, par équations intégrales, du problème d'une fissure plane débouchante à la surface libre. (English summary) **80e:45004**
Putot, Claude *See* **Huy Duong Bui, 80e:45004**

Secondary classifications:

Ammicht, E. Free surface and surface tension effects on submerged bodies. **(80j:76025)**
(Dümmel, Siegfried) *See* **Prößdorf, Siegfried, (80d:47044)**
Prößdorf, Siegfried ★Some classes of singular equations. **(80d:47044)**

45F99 None of the above, but in this section

Bogačev, V. A. A system of integral equations in spaces of entire functions of exponential type. (Russian) **80i:45014**

45Gxx Nonlinear integral equations [See also 47Hxx.]

45G05 Singular nonlinear integral equations

Decewicz, Grzegorz (*with* Leksiński, Wacław) On some system of integral equations with deviated argument. **80m:45009**
Leksiński, Wacław *See* **Decewicz, Grzegorz, 80m:45009**

Secondary classifications:

Coffman, Charles Vernon Variational theory of set-valued Hammerstein operators in Banach function spaces. The eigenvalue problem. **(80e:47047)**
Diekmann, Odo On a nonlinear integral equation arising in mathematical epidemiology. **(80g:45007)**
Mlienkova, T. A. On the question of the solution of a nonlinear singular integral equation. (Russian) **(80i:35129)**
Wong, R. Asymptotic expansions of fractional integrals involving logarithms. **(80b:26007)**

45G10 Other nonlinear integral equations

Alvino, Angelo (*with* Trombetti, Guido) Some observations on a class of nonlinear integral equations. (Italian) **80j:45010**
Britov, N. A. Points of bifurcation of a system of nonlinear integral equations. (Russian) **80f:45014**
Guo, Da Jun The solution of a nonlinear integral equation of nuclear physics. (Chinese) **80e:45005**
The solution of a nonlinear integral equation in neutron transport theory. (Chinese) **80h:45005**
Nontrivial solutions of Hammerstein nonlinear integral equations. (Chinese) **80e:45006**
(*with* Zhang, Qing Yong) Uniqueness of the solution of a nonlinear integral equation in nuclear physics. (Chinese. English summary) **80h:45006**
Joshi, S. R. (*with* Raghavendra, V.) Fixed point techniques in the study of abstract measure integral equations. **80d:45003**
Kiffe, Thomas The asymptotic behavior of bounded solutions of a nonconvolution Volterra equation. **80c:45010**
Leitman, M. J. (*with* Mizel, Victor J.) Asymptotic stability and the periodic solutions of $x(t)+\int_{-\infty}^{t} a(t-s)g(s, x(s))ds = f(t)$. **80k:45009**
Ljašenko, T. V. A special class of nonlinear integral equations. (Russian. English summary) **80g:45009**
Mel'nik, A. M. Nonnegative solutions of a nonlinear integral equation. (Russian) **80a:45015**
Mizel, Victor J. *See* **Leitman, M. J., 80k:45009**
Raghavendra, V. *See* **Joshi, S. R., 80d:45003**
Raslambekov, S. N. *See* **Rogožin, V. S., 80j:45011**
Rogožin, V. S. (*with* Raslambekov, S. N.) Noether theory for integral equations of the third kind in spaces of continuous and generalized functions. (Russian) **80j:45011**
Sprekels, Jürgen Finite-dimensional cone iteration techniques for superlinear Hammerstein equations. **80j:45012**
Sugiyama, Shobei On nonlinear Volterra integral equations with a small parameter. **80g:45010**
Thieme, Horst R. On a class of Hammerstein integral equations. **80i:45015**
Trombetti, Guido *See* **Alvino, Angelo, 80j:45010**
Zhang, Qing Yong *See* **Guo, Da Jun, 80h:45006**

Secondary classifications:

Ambro, M. Approximation of the solutions of integral equations with modified argument. (Romanian. English summary) **(80f:65141)**
Asanov, A. Sufficient conditions for the uniqueness of the solution of the Volterra and Volterra-Uryson equations. (Russian. Russian summary) **(80g:45001)**
Babickiĭ, V. I. (*with* Krupenin, V. L.) On the theory of parametric resonances of vibration-impact systems. **(80f:70022)**
Berman, Simeon M. (*with* Stewart, Alan L.) A nonlinear integral equation for visual impedance. **(80f:92007)**
Bulgakov, A. I. (*with* Ljapin, L. N.) Some properties of the set of solutions of a Volterra-Hammerstein integral inclusion. (Russian) **(80a:45007)**
Existence of a generalized solution of a functional-integral inclusion. (Russian) **(80g:47073)**
Gripenberg, Gustaf On a nonlinear Volterra integral equation in a Banach space. **(80f:47058)**
Helton, Jon C. (*with* Stuckwisch, Stephen) An approximation technique for nonlinear integral operations. **(80b:45026)**
Kiffe, Thomas (*with* Stecher, Michael) L^2 solutions of Volterra integral equations. **(80c:45005)**

Krupenin, V. L. *See* Babickiĭ, V. L. (80f:70022)
Leggett, Richard W. *See* Williams, Lynn R., (80i:47083)
Ljapin, L. N. *See* Bulgakov, A. I., (80a:45007)
Noguchi, Shoichi *See* Tanaka, Akio, (80j:94054)
Rossi, Anna Maria (*with* Sambuceti, Patrizia) The existence of a local solution of an evolution equation in Banach spaces. (Italian. English summary) (80i:34111)
Sambuceti, Patrizia *See* Rossi, Anna Maria, (80i:34111)
Schumacher, R. T. Self-sustained oscillations of the clarinet: an integral equation approach. (German and French summaries) (80i:76040)
Stecher, Michael *See* Kiffe, Thomas, (80c:45005)
Stewart, Alan L. *See* Berman, Simeon M., (80f:92007)
Stuckwisch, Stephen *See* Helton, Jon C., (80b:45026)
Tanaka, Akio (*with* Noguchi, Shoichi) Topological properties of continuous neural networks with analog neurons. (80j:94054)
Ulahov, A. M. Existence and uniqueness of the solutions of initial nonlinear integral equations of modified heredity in creep theory. (Russian) (80k:73039)
Williams, Lynn R. (*with* Leggett, Richard W.) Multiple fixed point theorems for problems in chemical reactor theory. (80i:47083)
v. Wolfersdorf, Lothar Necessary optimality conditions for control processes with singular integral equations and elliptic equations. (80j:49026)

45H05 Miscellaneous special kernels [See also 44A15.]

Bhonsle, B. R. (*with* Muley, D. B.) An integral equation involving classical orthogonal polynomials. 80f:45015
Chakrabarty, M. *See* Prabhakar, T. R., 80m:45011
Chhabra, S. P. *See* Joshi, B. K., 80g:45011
Curle, S. N. Solution of an integral equation of Lighthill. 80k:45010
Dixit, L. A. Inversion of an integral equation with generalized Rice's polynomial as kernel. 80h:45007
Gupta, H. L. An integral equation involving incomplete gamma function as the kernel. 80m:45010
Joshi, B. K. (*with* Chhabra, S. P.) Inversion of an integral equation involving hypergeometric function ${}_2F_2$. (Hindi. English summary) 80g:45011
Muley, D. B. *See* Bhonsle, B. R., 80f:45015
Prabhakar, T. R. (*with* Chakrabarty, M.) A class of basic integral equations with basic hypergeometric function ${}_1\Phi_1$ in the kernels. 80m:45011
Saxena, V. P. Some theorems on special integral equations. (Hindi. English summary) 80c:45011
Verma, R. U. A formal solution of an integral equation involving the H-function of two variables by L_2 and L_2^{-1} operators. 80j:45013

Secondary classifications:

Babeiko, V. A. A new method in the theory of three-dimensional dynamic mixed problems. (Russian) (80b:73015)
Dwivedi, A. P. (*with* Singh, V. B.) Simultaneous triple integral equations associated with H-function. (80a:45011)
Matvíčuk, K. S. Existence and uniqueness of solutions for the Kirkwood-Salzburg operator integral equations for the Bose and Fermi systems of quantum statistical physics. (Russian. English summary) (80f:82020)
McNabb, Alex (*with* Schumitzky, Alan) Factorization of Fredholm operators on analytic functions. (80i:47023)
Nouri-Moghadam, M. (*with* Yoshimura, Tetz) Application of Altman's contractor techniques to nonlinear integral equations for Green's functions of augmented quantum field theory. (80e:81070)
Rubin, B. S. Correction: "A general method for the study of the Noethericity of operators of potential type with power-logarithmic kernels on a finite segment" [Izv. Akad. Nauk Armjan. SSR Ser. Mat. 12 (1977), no. 6, 447–461; MR 58 #7224]. (Russian) (80j:47062)
Schumitzky, Alan *See* McNabb, Alex, (80i:47023)
Singh, V. B. *See* Dwivedi, A. P., (80a:45011)
Solov'ev, A. A. Continuity in L^p of the integral operator with a Bergman kernel. (Russian. English summary) (80f:47045)
Sztyren, Małgorzata On the boundary forces in a solvable integral model of nonlocal elastic half-space. (Russian summary) (80a:73063)
Yoshimura, Tetz *See* Nouri-Moghadam, M., (80e:81070)

45J05 Integro-ordinary differential equations

Alzicovici, Sergiu Existence theorems for a class of integro-differential equations. 80h:45008
On a nonlinear integro-differential equation. 80c:45012
Aliev, N. M. *See* Aliev, Rafik M., 80e:45007
Aliev, Rafik M. (*with* Aliev, N. M.) An initial problem for a system of integro-differential equations with deviating argument. (Russian) 80e:45007
Anarov, R. (*with* Larionov, G. S.) The Volterra model with a weakly linear hereditary characteristic. (Russian) 80b:45012
Bainov, D. D. (*with* Hristova, S. G.) Justification of the averaging method for nonlinear systems of integro-differential equations of Volterra type on an infinite interval. (Bulgarian. Russian and English summaries) 80a:45016
(*with* Miluševa, Svetla D.) Application of the averaging method to solving boundary problems for systems of integro-differential equations with a linear boundary condition. 80i:45016
(*with* Miluševa, Svetla D.) Justification of the averaging method for a certain class of singularly perturbed integro-differential equations. (Russian) 80h:45009
(*with* Miluševa, Svetla D.) On the application of a method of partial averaging to the solution of multipoint boundary value problems with a nonlinear boundary condition for systems of integro-differential equations. (Russian. Bulgarian and English summaries) 80m:45012
(*with* Miluševa, Svetla D.) Application of the averaging method to a two-point boundary value problem for integrodifferential equations of Fredholm type that are unsolved with respect to the derivative. (Russian) 80a:45017
(*with* Miluševa, Svetla D.) Application of the averaging method to a two-point boundary value problem for nonlinear systems of integro-differential equations. (Russian) 80c:45013
See also Miluševa, Svetla D., 80f:45018; Nikolova, T. St., 80f:45019 *and* Nikolova, T. St., 80m:45013
Bobočko, V. M. (*with* Markuš, I. I.) ★Асимптотические методы в теории линейных сингулярно возмущенных интегро-дифференциальных уравнений. (Russian) [Asymptotic methods in the theory of linear singularly perturbed integro-differential equations] 80h:45010
Burton, T. A. Stability theory for Volterra equations. 80f:45016
Čehlov, V. I. On the solvability of a nonlinear integro-differential system with an unknown boundary. (Russian) 80a:45018
Cushing, J. M. Nontrivial periodic solutions of integro-differential equations. 80b:45017
Fargue, Daniel (*with* Fer, Francis) Existence du minimum d'une fonctionnelle non convexe et application à la résolution d'une équation intégro-différentielle non linéaire. (English summary) 80b:45013
Fer, Francis *See* Fargue, Daniel, 80b:45013
Gavrin, V. P. A singular integro-differential equation with conjugation. (Russian. English summary) 80a:45019
Grabmüller, Hans Hyperbolic integro-differential equations of convolution type. 80k:45011
Gregory, John Generalized Fredholm quadratic forms and integral differential equations of the second kind. 80j:45014
Hannsgen, Kenneth B. An integrodifferential equation asymptotically of convolution type. 80b:45014
Hristova, S. G. *See* Bainov, D. D., 80a:45016
Ivanova, M. A. The existence of the solution of a class of integro-differential equations in the neighborhood of a regular singular point. (Russian) 80j:45015
Jordan, G. S. Asymptotic stability of a class of integro-differential systems. 80i:45018
Kadob'jans'kiĭ, R. M. *See* Kozak, P. P., 80b:45015 *and* Kozak, P. P., 80k:45012
Kozak, P. P. (*with* Kadob'jans'kiĭ, R. M.) Representation of the solution of the Cauchy problem for systems of nonlinear integro-differential equations in the form of a multiple Wiener integral. (Russian. English summary) 80b:45015
(*with* Kadob'jans'kiĭ, R. M.) Representation of the solution of a characteristic problem for a system of nonlinear integro-differential equations as a Wiener integral. (Russian. English summary) 80k:45012
Krivošein, L. E. (*with* Leung, K. V.; Mangeron, D.; Oğuztöreli, Mehmet Namık) Analyse mathématique. Étude de certains systèmes intégrodifférentiels non linéaires aux opérateurs paraboliques et aux autoréglages multiples dans les limites d'intégration. (English and Spanish summaries) 80g:45012
Kuppuswamy Rao, K. *See* Sree Hari Rao, V., 80h:45015
Kvantaliani, K. I. Asymptotic behavior of the Cauchy problem for a class of integro-differential equations with a small parameter. (Russian) 80b:45016
Larionov, G. S. *See* Anarov, R., 80b:45012
Leung, K. V. *See* Krivošein, L. E.; et al., 80g:45012
Lodge, A. S. (*with* McLeod, J. B.; Nohel, John A.) A nonlinear singularly perturbed Volterra integro-differential equation occurring in polymer rheology. 80c:45008
(*with* McLeod, J. B.; Nohel, John A.) A nonlinear singularly perturbed Volterra integro-differential equation occurring in polymer rheology. 80f:45017
Loginov, V. M. Averaging in systems of integro-differential equations of special type. (Russian) 80e:45009
Londen, Stig-Olof On the asymptotics of a nonlinear scalar Volterra integro-differential equation. 80j:45016
Luca, N. The stability of the solutions of a class of integro-differential systems with infinite delays. 80e:45010
Mangeron, D. *See* Krivošein, L. E.; et al., 80g:45012
Markuš, I. I. *See* Bobočko, V. M., 80h:45010
McLeod, J. B. *See* Lodge, A. S.; et al., 80c:45008 *and* Lodge, A. S.; et al., 80f:45017
Miller, Richard K. (*with* Wheeler, Robert L.) Well-posedness and stability of linear Volterra integro-differential equations in abstract spaces. 80j:45017
Miluševa, Svetla D. Application of the freezing method for the solution of multi-point boundary value problems with a nonlinear boundary condition for systems of integrodifferential equations of Volterra type. (Russian. English and Bulgarian summaries) 80a:45020
(*with* Bainov, D. D.) Application of the averaging method for systems of integro-differential equations of Fredholm type with impulses. (Russian) 80f:45018
See also Bainov, D. D., 80a:45017; Bainov, D. D., 80c:45013; Bainov, D. D., 80h:45009; Bainov, D. D., 80i:45016 *and* Bainov, D. D., 80m:45012
Nakagiri, Shin-ichi Oscillatory property for Volterra integro-differential equations of higher order. 80h:45011
Naumann, Joachim On a class of first-order evolution inequalities arising in heat conduction with memory. 80i:45019
Nikolova, T. St. (*with* Bainov, D. D.) Existence and uniqueness of the solution of some integro-differential equations. (Bulgarian. Russian and English summaries) 80m:45013
(*with* Bainov, D. D.) The existence and uniqueness of a solution of some systems of integro-differential equations. (Russian) 80f:45019
Nohel, John A. A nonlinear singularly perturbed Volterra functional differential equation. 80i:45020
See also Lodge, A. S.; et al., 80c:45008 *and* Lodge, A. S.; et al., 80f:45017
Nuržanov, O. D. Periodic solutions of integro-differential equations. (Russian) 80d:45004
Oğuztöreli, Mehmet Namık *See* Krivošein, L. E.; et al., 80g:45012
Pachpatte, B. G. On the behavior of solutions of a certain class of nonlinear integrodifferential equations. 80g:45013
On some fundamental integro-differential inequalities and their discrete analogues. 80h:45013

Integral perturbations in the theory of nonlinear systems of differential equations. (Spanish summary) **80b:45017**

Pukareva, N. V. An approximate method for the solution of integro-differential equations. (Russian) **80b:45012**

Pyhteev, G. N. (*with* Šokamolov, I.) A property of a singular Cauchy-type integral of special type and its use in obtaining a priori estimates of moduli of the derivatives of the required solution of a singular integro-differential equation. (Russian. Tajiki summary) **80g:45014**

Renardet, Charles Existence and boundedness of solutions of abstract nonlinear integro-differential equations of nonconvolution type. **80h:45013**

Sell, George R. Hyperbolic structures for linear Volterra differential equations. **80m:45014**

Šokamolov, I. *See* **Pyhteev, G. N., 80g:45014**

Sree Hari Rao, V. (*with* Kuppuswamy Rao, K.) On a nonlinear differential-integral equation for ecological problems. **80h:45015**

Ved', Ju. A. Asymptotic estimates for the solutions of nonlinear integro-differential equations of Volterra type. (Russian) **80h:45014**

Wheeler, Robert L. *See* **Miller, Richard K., 80j:45017**

Secondary classifications:

Angelov, V. G. (*with* Bainov, D. D.) Existence and uniqueness of the solution to the generalized Cauchy initial value problem for some nonlinear integro-differential equations in a space of integrable functions. (Russian) **80m:34060**

Bainov, D. D. (*with* Miluševa, Svetla D.) Application of the averaging method for the solution of boundary problems for ordinary differential and integro-differential equations. **80d:34020**

See also **Mitropol'skiĭ, Ju. O.; et al., 80j:34048** *and* **Angelov, V. G., 80m:34060**

Barbu, Viorel (*with* Malik, M. A.) Semilinear integro-differential equations in Hilbert space. **80e:45017**

Boulanger, Philippe (*with* Mayné, Georges) Linear viscoelastic materials of the integro-differential type. **80i:73027**

Butuzov, V. F. *See* **Vasil'eva, A. B., 80b:34070**

Cerone, P. *See* **Hill, J. M.; et al., 80h:34085**

Ciobanu, Gh. Gr. Stability of the solutions in linear viscoelasticity. (Romanian summary) **80a:73035**

De Blasi, F. S. (*with* Kwapisz, Marian; Myjak, J.) Generic properties of functional equations. **80h:34077**

Deimling, Klaus Cone-valued periodic solutions of ordinary differential equations. **80f:34102**

Elbert, Á. Comparison theorem for first-order nonlinear differential equations with delay. **80f:34120**

Hannsgen, Kenneth B. An L^1 remainder theorem for an integrodifferential equation with asymptotically periodic solution. **80b:45002**

Hill, J. M. (*with* Laird, Philip G.; Cerone, P.) Mellin-type integral equations for solutions of differential-difference equations. **80h:34085**

Jordan, G. S. A nonlinear singularly perturbed Volterra integro-differential equation of nonconvolution type. **80f:45005**

Kabak, G. I. Generalized Green matrix for a multivalued operator. (Russian) **80g:47054**

Kappel, F. (*with* Schappacher, Wilhelm) Nonlinear functional differential equations and abstract integral equations. **80m:34067**

Karnaukhov, V. G. *See* **Senchenkov, I. K., 80f:73006**

Kwapisz, Marian *See* **De Blasi, F. S.; et al., 80h:34077**

Laird, Philip G. *See* **Hill, J. M.; et al., 80h:34085**

Leonov, G. A. (*with* Smirnova, V. B.) Asymptotic solutions of a system of integro-differential equations with periodic nonlinear functions. (Russian) **80a:45025**

Maass, Wolfgang (*with* Petzold, J.) On the stability of motion of a radiating electron. **80a:81019**

Malik, M. A. *See* **Barbu, Viorel, 80e:45017**

Mayné, Georges *See* **Boulanger, Philippe, 80i:73027**

Miluševa, Svetla D. *See* **Bainov, D. D., 80d:34020** *and* **Mitropol'skiĭ, Ju. O.; et al., 80j:34048**

Mitropol'skiĭ, Ju. O. (*with* Bainov, D. D.; Miluševa, Svetla D.) Application of the averaging method to the solution of boundary value problems for ordinary differential and integro-differential equations. (Russian) **80j:34048**

Morchało, Jarosław On the existence and uniqueness of solutions of differential-integral equations with a deviated argument. **80a:34093**

Myjak, J. *See* **De Blasi, F. S.; et al., 80h:34077**

Pachpatte, B. G. On some fundamental integral inequalities with applications. **80j:26019**

A note on Gronwall type integrodifferential inequalities. **80j:26016**

On a stochastic integro-differential equation in a Banach space. **80e:60079**

Petzold, J. *See* **Maass, Wolfgang, 80a:81019**

Radziszewski, Bogusław Investigation of the stability of motion on the basis of the "best" Ljapunov function. (Polish) **80i:34080**

Reid, William T. Related oscillation criteria for higher order self-adjoint differential and integro-differential equations. **80g:34030**

Schappacher, Wilhelm *See* **Kappel, F., 80m:34067**

Senchenkov, I. K. (*with* Karnaukhov, V. G.) On the theory of integro-differential type media. (Russian. English summary) **80f:73006**

Simionescu, Claudia Lidia Control for an hereditary system. **80k:92018**

Smirnova, V. B. *See* **Leonov, G. A., 80a:45025**

Smith, Manfred C. On a nonlinear Volterra equation of nonconvolution type. **80f:45023**

Steudel, R. Zur iterativen Lösung von nichtlinearen Integrodifferentialgleichungsproblemen. (English and Russian summaries) **80g:65131**

Sugiyama, Shohei On nonlinear Volterra integral equations with a small parameter. **80g:45010**

Thakur, L. B. On some properties of stochastic integro-differential equations. **80f:60056**

Vasil'eva, A. B. (*with* Butuzov, V. F.) ★Сингулярно возмущенные уравнения в критических случаях. (Russian) [Singularly perturbed equations in critical cases] **80b:34070**

Vigfússon, Guðmundur The queer differential equations for adiabatic compression of plasma. **80f:82037**

45K05 Integro-partial differential equations

Barbu, Viorel Existence for nonlinear Volterra equations in Hilbert spaces. **80e:45011**

Case, K. M. Properties of the Benjamin-Ono equation. **80c:45014**

Černyšev, V. M. A class of linear integro-differential equations. (Russian) **80m:45015**

A stationary linear integro-differential equation. (Russian) **80m:45016**

Well-posedness of the Cauchy problem for a class of partial integro-differential equations. (Russian) **80a:45021**

Dafermos, C. M. (*with* Nohel, John A.) Energy methods for nonlinear hyperbolic Volterra integrodifferential equations. **80b:45018**

Dickey, R. W. The initial value problem for a nonlinear semi-infinite string. **80d:45005**

Domnic'kiĭ, V. M. Asymptotic solution of a system of integro-differential equations with retarded argument. (Russian) **80h:45016**

Fetecău, C. An uniqueness theorem in the linear theory of heat conducting with memory. (Romanian summary) **80k:45014**

Gaeva, E. A. *See* **Homa, G. P., 80i:45021**

Galkin, V. A. Stability and stabilization of the solutions of the coagulation equation. (Russian) **80b:45019**

Grabmüller, Hans ★Singular perturbation techniques applied to integro-differential equations. **80k:45015**

Hairullin, E. *See* **Mairapov, N. K., 80h:45018**

Homa, G. P. (*with* Gaeva, E. A.) The averaging method for hyperbolic integro-differential systems with fast and slow variables. (Russian) **80i:45021**

Ivanauskas, Feliksas Existence and properties of the solution of the Cauchy problem for a nonlinear system of integro-differential equations. (Russian. Lithuanian and English summaries) **80m:45017**

Kalandarišvili, D. G. Eigenvalues of an integro-differential equation with a small parameter. (Russian. Georgian and English summaries) **80m:45018**

Kolodiĭ, B. Ja. (*with* Šipka, Ĭ. G.) Existence of the solution of a nonlinear integro-differential equation. (Ukrainian. Russian summary) **80m:45019**

Lokšin, A. A. Wave equations with memory and one-dimensional oscillatory integrals. (Russian. English summary) **80h:45017**

Mairapov, N. K. (*with* Hairullin, E.) A system of integro-differential equations with a contour integral. (Russian. Kazakh summary) **80h:45018**

Miller, Richard K. An integro-differential equation for rigid heat conductors with memory. **80g:45015**

Nahušev, A. M. Boundary value problems for loaded integro-differential equations of hyperbolic type and some of their applications to the prediction of ground moisture. (Russian) **80f:45020**

Nohel, John A. *See* **Dafermos, C. M., 80b:45018**

Politjukov, V. P. On the theory of upper and lower solutions and the solvability of quasilinear integro-differential equations. (Russian) **80a:45022**

Rascle, Michel Sur une équation intégro-différentielle non linéaire issue de la biologie. **80f:45021**

Šipka, Ĭ. G. *See* **Kolodiĭ, B. Ja., 80m:45019**

Webb, G. F. Abstract Volterra integro-differential equations and a class of reaction-diffusion equations. **80j:45018**

Secondary classifications:

Agop, M. *See* **Merches, I., 80a:83046**

Al-Khafaji, Talib Solution of diffusion equation for *xyz*-geometry by Fourier expansions. (Arabic summary) **80h:35068**

Angelescu, N. (*with* Protopopescu, V.) Asymptotic equivalence between the hydrodynamic and kinetic stages for the Lorentz model. **80j:82014**

Asou, Motoko *See* **Yano, Mayumi; et al., 80j:82005**

Ayik, S. (*with* Nörenberg, W.) Transport theory of dissipative heavy-ion collisions. I. Basic formulation. **80a:82041**

(Barancev, R. G.) *See* **Cercignani, Carlo, 80a:82042** *and* **Aerodynamics of rarefied gases, 80m:76064a)**

Belleni-Morante, A. An integro-differential equation arising from the theory of heat conduction in rigid materials with memory. (Italian summary) **80c:73008**

Bloom, Frederick A note on growth estimates for the displacement vector in viscoelastic materials. **80a:73034**

Stability and growth estimates for electric fields in non-conducting material dielectrics. **80d:78033**

Bobker, D. S. A quantum neutron diffusion equation and its classical limit. **80k:82077**

Boffi, V. C. (*with* Molinari, V. G.) Integral transport theory for charged particles in electric and magnetic fields. (Italian and Russian summaries) **80b:82061**

Borysiewicz, M. (*with* Stankiewicz, Roman) Weak solution and approximate methods for the transport equation. **80e:82049**

(*with* Stankiewicz, Roman) Variational formulation and projectional methods for the second-order transport equation. **80i:82032**

Boulanger, Philippe (*with* Mayné, Georges) Modèles intégro-différentiels en électrodynamique linéaire des continus. (English summary) **80a:78006**

Bowden, R. L. (*with* Garbanati, L. Freede) Constructive solution of the linearized Boltzmann equation. Scalar BGK model equation. **80c:82030**

(*with* Cameron, W. L.) Constructive solution of the linearized Boltzmann equation: vector BGK model. **80h:82025**

Brovar, V. V. On the calculation of potential by the Stokes equation. **80a:86002**

Burov, A. V. Solutions of interior stationary problems for the Boltzmann equation. (Russian. English summary) **(80m:82031)**

Cabannes, Henri Global solution of the initial value problem for the discrete Boltzmann equation. (Polish and Russian summaries) **(80d:82006)**

Caflisch, Russel E. (*with* Papanicolaou, George C.) The fluid dynamical limit of a nonlinear model Boltzmann equation. **(80e:82044)**

Cameron, W. L. *See* **Bowden, R. L., (80h:82025)**

Cercignani, Carlo ★Теория и приложения уравнения Больцмана. (Russian) [Theory and application of the Boltzmann equation] **(80a:82042)**

Three lectures on the Boltzmann equation. **(80i:82007)**

Chakravarti, Subhendu P. (*with* De, U. K.) Metrics of static spheroidal charged dust distributions. **(80c:83042)**

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Cortois, Jean *See* **Jauffret, Claude, (80b:81116)**

Das, Rabindra Nath Exact solution of the problem of diffuse reflection and transmission by the method of Laplace transform and linear singular operators. **(80a:82017)**

Exact solution of a problem in a stellar atmosphere using the Laplace transform and the Wiener-Hopf technique. **(80k:85008)**

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De, U. K. *See* **Chakravarti, Subhendu P., (80c:83042)**

DeGregoria, A. J. Understanding the self-interaction of charged particles. (Italian and Russian summaries) **(80f:81123)**

Dufty, James D. (*with* Lindenfeld, Michael J.) Nonlinear transport in the Boltzmann limit. **(80b:82062)**

(Ender, I. A.) *See* **Cercignani, Carlo, (80a:82042)**

Ėpendiev, M. B. *See* **Ol'hovskiĭ, I. I., (80a:82036)**

Fichera, Gaetano Integro-differential problems of hereditary elasticity. **(80e:73033)**

Gabov, S. A. On the Whitham equation. (Russian) **(80g:35074)**

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Gibbs, Alan G. (*with* Seto, Richard) The transport equation with anisotropic scattering in finite slab geometry. **(80a:82045)**

Grabert, Hermann Fluctuations in nonlinear Markovian systems. **(80e:82004)**

Grafarend, E. (*with* Hauer, K.) The equilibrium figure of the earth. I. **(80a:86004)**

(Gurmuzova, Ė. A.) *See* **Cercignani, Carlo, (80a:82042)**

Hamza, K. A. A. Modified integral equations for the Coulomb *T*-matrix. (Italian and Russian summaries) **(80g:81064)**

Hartmann, H. *See* **Ulmer, W., (80a:81027)**

Hauer, K. *See* **Grafarend, E., (80a:86004)**

Ignat, Margareta Plane waves in a rarefied, radiative, electrically anisotropic plasma. I. Small perturbation equations. (Italian. English summary) **(80k:82013a)**

Plane waves in a rarefied, radiative and electrically anisotropic plasma. II. Particular plane waves. (Italian. English summary) **(80k:82013b)**

Jauffret, Claude (*with* Cortois, Jean) Faddeev equations for four-body atomic problems in the momentum representation. **(80b:81116)**

Kanal, Madhoo (*with* Moses, Harry E.) Direct-inverse problems in transport theory, the inverse albedo problem for a finite medium. **(80b:82044)**

Kaper, Hans G. A constructive approach to the solution of a class of boundary value problems of mixed type. **(80d:82046c)**

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Spectral representation of an unbounded linear transformation arising in the kinetic theory of gases. **(80d:82046b)**

Karasev, M. V. (*with* Maslov, V. P.) Quasiclassical soliton solutions of the Hartree equation. Newtonian interaction with screening. (Russian. English summary) **(80i:81078)**

Kasture, D. Y. *See* **Shastri, R. P., (80e:35008a)** *and* **Shastri, R. P., (80e:35008b)**

Knobloch, Edgar Tidal interaction of galaxies. **(80b:85002)**

Kynci, J. (*with* Marek, Ivo) Some problems in neutron transport theory. **(80e:82050)**

Larsen, Edward W. A homogenized multigroup diffusion theory for the neutron transport equation. **(80i:82034)**

Lauro, Giuliana (*with* Renno, Pasquale) Asymptotic behavior of the electromagnetic field in an ionized gas. (Italian. English summary) **(80c:78013)**

Lewins, J. Linear stochastic neutron transport theory. **(80a:82047)**

Lindenfeld, Michael J. *See* **Dufty, James D., (80b:82062)**

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Makarov, A. A. Correct solvability classes of a general boundary value problem in an infinite layer for systems of linear convolution equations. (Russian) **(80m:45005)**

Marek, Ivo *See* **Kynci, J., (80e:82050)**

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Maslov, V. P. *See* **Karasev, M. V., (80i:81078)**

Maslova, N. B. Stationary problems for the Boltzmann equation for large Knudsen numbers. (Russian) **(80m:76064b)**

Matsumoto, Masamichi Functional equations in emitting atmospheres. **(80a:85002)**

Maynė, Georges *See* **Boulanger, Philippe, (80a:78006)**

(Mesmonov, V. P.) *See* **Cercignani, Carlo, (80a:82042)**

Mercheş, I. (*with* Agop, M.) The relativistic Boltzmann equation and the macroscopic equations of conservation. **(80a:83046)**

Merkur'ev, S. P. Integral equations in the quantum scattering problem for a system of three charged particles. (Russian. English summary) **(80f:81094)**

Mika, Janusz Hilbert asymptotic expansion method for the linear Boltzmann equation. **(80c:82017)**

Molinari, V. G. *See* **Boffi, V. C., (80b:82061)**

Montes, Carlos Nonlinear kinetic equation in plasma physics leading to soliton structures. **(80k:82051)**

Morsal, H. Derivation and low density solution of a nonlinear Kirkwood-Salsburg equation. **(80a:82049)**

Moses, Harry E. *See* **Kanal, Madhoo, (80b:82044)**

Nishida, Takaaki The initial value problem of the Boltzmann equation and its fluid dynamical limit at the level of compressible Euler equation. **(80c:76046)**

Nižnik, L. P. (*with* Tarasov, V. G.) An inverse problem of scattering for a one-velocity transfer equation. (Russian) **(80h:85010)**

Nörenberg, W. *See* **Aylk, S., (80a:82041)**

Oğuztörell, Mehmet Namık Activities in a one-dimensional continuous neural network. **(80a:92030)**

Ol'hovskiĭ, I. I. (*with* Ėpendiev, M. B.) A kinetic equation for high-energy small-mass particles interacting with a crystal. (Russian) **(80a:82036)**

Pachpatte, B. G. On some new integral and integrodifferential inequalities in two independent variables and their applications. **(80f:26010)**

Pao, C. V. Positive solution of an integro-differential system in neutron transport with delayed neutron. (Italian summary) **(80e:82052)**

An iterative method for solving a nonstationary radiation diffusion system. (German summary) **(80k:65107)**

Bifurcation analysis on a nonlinear diffusion system in reactor dynamics. **(80g:82050)**

Asymptotic behavior of the solution for the time-dependent neutron transport problem. **(80g:82052)**

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Politjakov, V. P. A method of solving boundary value problems for nonlinear transport equations. (Russian) **(80j:80008)**

Pomraning, G. C. *See* **Wilson, H. L.; et al., (80c:82052)**

Protopopescu, V. *See* **Angelescu, N., (80j:82014)**

Prugovečki, Eduard Consistent formulation of relativistic dynamics for massive spin-zero particles in external fields. **(80a:81056)**

Ray, Dipankar On a class of solutions of nonlinear Boltzmann equations. **(80e:82009)**

Rédei, L. B. Bound for the harmonic oscillator Green's function. **(80c:34020)**

Renno, Pasquale *See* **Lauro, Giuliana, (80c:78013)**

Résibois, P. (*with* Mareschal, M.) Kinetic equations, initial conditions and time-reversal: a solvable one-dimensional model revisited. **(80b:82041)**

Rykov, V. A. *See* **Macuk, V. A., (80c:82031)**

Schmutzer, Ernst Electromagnetic field of a rotating permanently magnetized sphere in the inertial and the comoving frames of reference. **(80h:78004)**

Scott, W. H. *See* **Wilson, H. L.; et al., (80c:82052)**

Seto, Richard *See* **Gibbs, Alan G., (80a:82045)**

Shastri, R. P. (*with* Kasture, D. Y.) Wendroff type inequalties. **(80e:35008a)**

(*with* Kasture, D. Y.) Erratum to: "Wendroff type inequalities" (Proc. Amer. Math. Soc. **72** (1978), no. 2, 248–250). **(80e:35008b)**

Shinohara, Masahiko A remark on the Hilbert paradox of Boltzmann equation. **(80g:82019)**

(Skvorcov, G. E.) *See* **Cercignani, Carlo, (80a:82042)**

Spiga, G. Spectral analysis of a time dependent particles transport problem by an integral approach. **(80f:82057)**

Stankiewicz, Roman *See* **Boryśiewicz, M., (80e:82049)** *and* **Boryśiewicz, M., (80i:82032)**

Stanković, B. Linear differential equations with coefficients in a field. I. **(80k:44006)**

Takahashi, Yasushi Point splitting technique and canonical formalism. (Italian and Russian summaries) **(80c:81051)**

Tanaka, Hiroshi Probabilistic treatment of the Boltzmann equation of Maxwellian molecules. **(80b:60083)**

Tarasov, V. G. *See* **Nižnik, L. P., (80h:85010)**

Tessarotto, M. *See* **Clemente, R., (80c:82001)**

Tsuboi, Yasuko *See* **Yano, Mayumi; et al., (80j:82005)**

Ulmer, W. (*with* Hartmann, H.) On the application of a Gauss transformation in nonlinear quantum mechanics. (Italian and Russian summaries) **(80a:81027)**

Wilkes, N. S. Continuous dependence and instability in linear viscoelasticity. (French summary) **(80c:73038)**

Wilson, H. L. (*with* Scott, W. H.; Pomraning, G. C.) Neutron transport in moving media. **(80c:82052)**

Yano, Mayumi (*with* Asou, Motoko; Tsuboi, Yasuko) Analysis of two types of the master and the Langevin equations. **(80j:82005)**

Aerodynamics of rarefied gases ★Аэродинамика разреженных газов. Вып. 9. (Russian) [Aerodynamics of rarefied gases. No. 9] **(80m:76064a)**

45Lxx Approximation of solutions

45L05 Theoretical approximation of solutions

Anselone, Philip M. (*with* Lee, John W.) A unified approach to the approximate solution of linear integral equations. **80m:45020**

Apaličeva, L. A. (*with* Gorlov, V. E.) Approximate solution of integral equations by the moment method. (Russian) **80g:45016**

Bellomo, N. (*with* Pistone, G.) Direct solution methods for a class of integral equations with random distribution of the inhomogeneous part. **80m:45031**

Čebotaru, I. S. *See* **Zolotarevskiĭ, V. A., 80m:45022**

Dorofeev, I. F. The solution of integral equations of the first kind in the class of functions with bounded variation. (Russian) **80f:45022**

Gegel', È. I. Accelerated convergence in the method of equivalent correspondence. (Russian) **80h:45019**

Gorlov, V. E. *See* **Apaličeva, L. A., 80g:45016**

Kupradze, V. D. A direct method for the solution of boundary value problems of mathematical physics. (Russian) **80h:45020**

Lee, John W. *See* **Anselone, Philip M., 80m:45020**

Lepik, R. *See* **Vainikko, G., 80j:45019**

Musina, S. S. Construction of approximations for an integro-differential equation. (Russian) **80e:45012**

Approximate solution of an integro-differential equation. (Russian) **80e:45013**

Pistone, G. *See* **Bellomo, N., 80m:45021**

Vainikko, G. (*with* Lepik, R.) On the reduction method for multidimensional discrete

Wiener-Hopf equations. (Russian. Estonian and English summaries) **80j:45019**

Zolotarevskiĭ, V. A. (*with* Čebotaru, I. S.) Approximate solution of systems of Wiener-Hopf equations with nonzero partial indices. (Russian) **80m:45022**

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Barnsley, Michael F. *See* **Robinson, Peter D., (80b:65157)**

Bowden, R. L. A note on the iteration of the Chandrasekhar nonlinear H-equation. **(80f:82005)**

Chen, S. H. *See* **Keer, L. M.; et al., (80d:73111)**

Comninou, Maria *See* **Keer, L. M.; et al., (80d:73111)**

Feloio, Iolanda Verna An extension of the Gauss-Seidel method for the numerical solution of nonlinear Fredholm integral equations of the second kind. (Italian) **(80e:65124)**

Haikin, M. I. A system of integral equations of Wiener-Hopf type in the special case as an ill-posed problem. (Russian) **(80a:65267)**

Hubedžašvili, Š. S. *See* **Kubiašvili, M. D., (80f:45010)**

Keer, L. M. (*with* Chen, S. H.; Comninou, Maria) The interface penny-shaped crack reconsidered. **(80d:73111)**

Kubiašvili, M. D. (*with* Hubedžašvili, Š. S.) Approximate solution of some singular integral equations in the case of nonclosed contours of integration. (Russian) **(80f:45010)**

Mariak, A. L. *See* **Vainikko, G., (80c:65256)**

Pubareva, N. V. An approximate method for the solution of integro-differential equations. (Russian) **(80b:45012)**

Robinson, Peter D. (*with* Barnsley, Michael F.) Pointwise bivariational bounds on solutions of Fredholm integral equations. **(80b:65157)**

Steudel, R. Zur iterativen Lösung von nichtlinearen Integrodifferentialgleichungsproblemen. (English and Russian summaries) **(80g:65131)**

Vainikko, G. (*with* Mariak, A. L.) The rate of convergence of the method of discrete ordinates in the problem of radiation transfer. (Russian) **(80c:65256)**

45L10 Numerical approximation of solutions {For numerical analysis, see 65R20.}

Bainov, D. D. *See* **Sarafova, G., 80h:45021**

Bownds, John M. A combined recursive collocation and kernel approximation technique for certain singular Volterra integral equations. **80h:45020**

Brunner, Hermann On superconvergence in collocation methods for Abel integral equations. **80m:45023**

Chawla, M. M. (*with* Kumar, Sheo) Chebyshev series method for the approximate solution of Volterra integral equations with singular kernels. **80g:45017**

Christiansen, Søren (*with* Hougaard, P.) An investigation of a pair of integral equations for the biharmonic problem. **80b:45021**

Hougaard, P. *See* **Christiansen, Søren, 80b:45021**

Kumar, Sheo *See* **Chawla, M. M., 80g:45017**

Mamedov, A. M. (*with* Tagieva, Z. A.) The approximate solution of multidimensional linear integral equations in a subclass of analytic functions. (Russian. Azerbaijani and English summaries) **80e:45014**

Sarafova, G. (*with* Bainov, D. D.) Application of a method of two-sided approximations for the estimation of periodic solutions of a system of integro-differential equations of Volterra type. (Russian. Bulgarian and English summaries) **80h:45021**

Stojanović, Mirosława Solution of systems of Volterra linear integral equations by the remainder method. (Russian) **80e:45015**

Tagieva, Z. A. *See* **Mamedov, A. M., 80e:45014**

Secondary classifications:

Arsenin, V. Ja. (*with* Zagonov, V. P.; Trahoniotovskaja, R. A.) Numerical solution of convolution-type integral equations of the first kind on nonuniform grids. (Russian) **(80e:65123)**

Dow, M. L. (*with* Elliott, David) The numerical solution of singular integral equations over $(-1, 1)$. **(80b:65151)**

Elliott, David *See* **Dow, M. L., (80b:65151)**

Ioakimidis, Nikolaos I. (*with* Theocaris, Pericles S.) Numerical solution of Cauchy type singular integral equations by use of the Lobatto-Jacobi numerical integration rule. (Czech summary) **(80f:65145)**

Malinowski, H. *See* **Smarzewski, R., (80c:65253)**

Pröβdorf, Siegfried (*with* Silbermann, Bernd) Gestörte Projektionsverfahren und einige ihrer Anwendungen. (English summary) **(80e:65041)**

Silbermann, Bernd *See* **Pröβdorf, Siegfried, (80e:65041)**

Smarzewski, R. (*with* Malinowski, H.) Numerical solutions of a class of Abel integral equations. **(80c:65253)**

Theocaris, Pericles S. (*with* Tsamasphyros, G. J.) Numerical solution of systems of singular integral equations with variable coefficients. **(80f:65148)**

See also **Ioakimidis, Nikolaos I., (80f:65145)**

Trahoniotovskaja, R. A. *See* **Arsenin, V. Ja.; et al., (80e:65123)**

Tsamasphyros, G. J. *See* **Theocaris, Pericles S., (80f:65148)**

Zagonov, V. P. *See* **Arsenin, V. Ja.; et al., (80e:65123)**

Zlatarov, D. P. New approach to the solution of the integral equation of the first kind. **(80f:65150)**

45L99 None of the above, but in this section

Secondary classifications:

Syros, C. The linear Boltzmann equation properties and solutions. **(80c:82051)**

45Mxx Qualitative behavior

45M05 Asymptotics

Beljanin, M. P. A system of integro-differential equations with a small parameter multiplying the derivative of conditionally stable type. (Russian) **80a:45023**

Domnic'kiĭ, V. M. Asymptotic representation of solutions of a system of integro-differential equations of rational rank with retarded argument. (Russian. English summary) **80a:45024**

Leonov, G. A. (*with* Smirnova, V. B.) Asymptotic solutions of a system of integro-differential equations with periodic nonlinear functions. (Russian) **80a:45025**

Maksudov, R. The asymptotic expansion of solutions of some integro-differential equations. (Russian) **80a:45026**

Müller, G. O. Zum asymptotischen Verhalten von Volterra- und Fredholmintegralgleichungen. **80e:45016**

Smirnova, V. B. *See* **Leonov, G. A., 80a:45025**

Smith, Manfred C. On a nonlinear Volterra equation of nonconvolution type. **80f:45023**

Ved', Ju. A. The influence of integral perturbations on the power asymptotic behavior of the solutions of differential equations. (Russian) **80a:45027**

Secondary classifications:

Bainov, D. D. (*with* Miluševa, Svetla D.) On the application of a method of partial averaging to the solution of multipoint boundary value problems with a nonlinear boundary condition for systems of integro-differential equations. (Russian. Bulgarian and English summaries) **(80m:45012)**

(*with* Miluševa, Svetla D.) Application of the averaging method to a two-point boundary value problem for integrodifferential equations of Fredholm type that are unsolved with respect to the derivative. (Russian) **(80a:45017)**

Fink, A. M. (*with* Madych, W. R.) On certain bounded solutions of $g * \mu = f$. **(80f:45001)**

Hannsgen, Kenneth B. An L^1 remainder theorem for an integrodifferential equation with asymptotically periodic solution. **(80b:45002)**

Jordan, G. S. A nonlinear singularly perturbed Volterra integro-differential equation of nonconvolution type. **(80f:45005)**

Kuz'mina, M. G. (*with* Maslennikov, M. V.) Asymptotic characteristics of a polarized radiation field in the case of small absorption. (Russian) **(80g:82048)**

Madych, W. R. *See* **Fink, A. M., (80f:45001)**

Maslennikov, M. V. *See* **Kuz'mina, M. G., (80g:82048)**

Miluševa, Svetla D. *See* **Bainov, D. D., (80a:45017)** *and* **Bainov, D. D., (80m:45017)**

Pitkäranta, Juhani Asymptotic behavior of the solution of the integral transport equation in the vicinity of a curved material interface. **(80k:82080)**

Popov, V. M. Monotonicity and mutability. **(80m:34036)**

Staffans, Olof J. An asymptotic problem for a positive definite operator-valued Volterra kernel. **(80b:45003)**

On the asymptotic behavior of finite energy solutions of an abstract integral equation. **(80b:45004)**

Thieme, Horst R. Asymptotic estimates of the solutions of nonlinear integral equations and asymptotic speeds for the spread of populations. **(80g:92033)**

45M10 Stability theory

DeFranco, R. J. Stability results for multiple Volterra integral equations. **80a:45028**

Secondary classifications:

Burton, T. A. Stability theory for Volterra equations. **(80f:45016)**

Collatz, Lothar Verzweigungsdiagramme und Hypergraphen. **(80d:58016)**

Domnic'kiĭ, V. M. Asymptotic solution of a system of integro-differential equations with retarded argument. (Russian) **(80h:45016)**

Jordan, G. S. Asymptotic stability of a class of integro-differential systems. **(80f:45018)**

Levin, J. J. On the asymptotic behavior of solutions of integral equations. **(80j:45004)**

Luca, N. The stability of the solutions of a class of integro-differential systems with infinite delays. **(80e:45010)**

Radziszewski, Bogusław Investigation of the stability of motion on the basis of the "best" Ljapunov function. (Polish) **(80i:34080)**

Staffans, Olof J. Some energy estimates for a nondifferentiated Volterra equation. **(80f:45007)**

Wexler, D. Frequency domain stability for a class of equations arising in reactor dynamics. **(80f:45007)**

45M99 None of the above, but in this section

Secondary classifications:

Butuzov, V. F. *See* **Vasil'eva, A. B., (80b:34070)**

Chappinelli, R. (*with* Stuart, Charles A.) Bifurcation when the linearized problem has no eigenvalues. **(80a:34030)**

Martin, Robert H., Jr. Asymptotic behavior for semilinear differential equations in Banach spaces. **(80a:35015)**

Stuart, Charles A. *See* **Chappinelli, R., (80a:34030)**

Vasil'eva, A. B. (*with* Butuzov, V. F.) ★Сингулярно возмущенные уравнения в критических случаях. (Russian) [Singularly perturbed equations in critical cases] **(80b:34070)**

45N05 Abstract integral equations, integral equations in abstract spaces

Abdymanapov, S. A. Boundedness of some integral operators in fractional spaces. (Russian) **80b:45022**

Barbu, Viorel (*with* Malik, M. A.) Semilinear integro-differential equations in Hilbert space. **80c:45017**

Bulgakov, A. I. (*with* Ljapin, L. N.) Integral inclusion with a functional operator. (Russian) **80j:45020**

Chatfield, J. A. Solution for an integral equation with continuous interval functions. **80h:45022**

Diekmann, Odo (*with* Kaper, Hans G.) On the bounded solutions of a nonlinear convolution equation. **80c:45015**

Din' Bat Tham Some properties of sets that are connected with closed paths. (Russian) **80h:45023**

Gripenberg, Gustaf On some integral and integro-differential equations in a Hilbert space. **80i:45022**

An existence result for a nonlinear Volterra integral equation in a Hilbert space. **80c:45016**

Helton, Jon C. Nonlinear operations and the solution of integral equations. **80b:45023**

Imomnazarov, B. Volterra operator equations. (Russian) **80b:45024**

Kaper, Hans G. *See* **Diekmann, Odo, 80c:45015**

Kilbas, A. A. Integral operators with logarithmic kernels on the totality of segments of the real axis. (Russian) **80d:45006**

Korotkov, V. B. General integral equations of the third kind. (Russian) **80i:45023**

Ljapin, L. N. *See* **Bulgakov, A. I., 80j:45020**

MacCamy, Richard C. (*with* Mizel, Victor J.) Nonlinear vector-valued hereditary equations on the line. **80j:45021**

Malik, M. A. *See* **Barbu, Viorel, 80c:45017**

Miller, Richard K. Well-posedness of abstract Volterra problems. **80j:45022**

Mizel, Victor J. *See* **MacCamy, Richard C., 80j:45021**

Naumann, Joachim On second-order evolution inequalities of Volterra type. **80i:45024**

Nohel, John A. An abstract nonlinear Volterra equation. **80b:45025**

Nowicka, Krystyna Existence, uniqueness and successive approximations for a class of integral-functional equations. **80m:45024**

Staffans, Olof J. On the asymptotic spectrum of a convolution. **80i:45025**

Travis, C. C. (*with* Webb, G. F.) An abstract second-order semilinear Volterra integro-differential equation. **80c:45018**

Webb, G. F. *See* **Travis, C. C., 80c:45018**

Secondary classifications:

Alzicovici, Sergiu On a nonlinear integro-differential equation. **(80c:45012)**

Barbu, Viorel Existence for nonlinear Volterra equations in Hilbert spaces. **(80c:45011)**

Clément, Philippe (*with* Nohel, John A.) Abstract linear and nonlinear Volterra equations preserving positivity. **(80b:47095)**

Costabel, Martin A contribution to the theory of singular integral equations with Carleman shift. **(80i:45008)**

Fitzgibbon, W. E. Product integral representation of solutions to semilinear Volterra equations with delay. **(80g:45002)**

Representation and approximation of solutions to semilinear Volterra equations with delay. **(80f:45004)**

Grimmer, R. C. (*with* Miller, Richard K.) Well posedness of Volterra integral equations in Hilbert space. **(80i:45003)**

Gripenberg, Gustaf On an abstract integral equation. **(80i:45005)**

Helton, Jon C. (*with* Stuckwisch, Stephen) An approximation technique for nonlinear integral operations. **(80b:45026)**

Joshi, Mohan C. (*with* Srikanth, P. N.) On a class of nonlinear integral equations. **(80m:47060)**

Kiffe, Thomas (*with* Stecher, Michael) A characterization of the range of a nonlinear Volterra integral operator. **(80k:45004)**

Koulenko, Ju. V. Nonlinear Volterra integral equations with a nonmonotone operator which have positive solutions. (Russian) **(80h:45002)**

Kwapisz, Marian (*with* Turo, Jan) On some class of integral-functional equations in locally convex spaces. **(80h:39005)**

(*with* Turo, Jan) On the existence and uniqueness of integrable solutions of functional equations in a Banach space. **(80i:39012)**

Martin, Robert H., Jr. Asymptotic behavior for semilinear differential equations in Banach spaces. **(80a:35015)**

Miller, Richard K. *See* **Grimmer, R. C., (80i:45003)**

Nohel, John A. *See* **Clément, Philippe, (80b:47095)**

Srikanth, P. N. *See* **Joshi, Mohan C., (80m:47060)**

Stecher, Michael *See* **Kiffe, Thomas, (80k:45004)**

Stuckwisch, Stephen *See* **Helton, Jon C., (80b:45026)**

Turo, Jan *See* **Kwapisz, Marian, (80i:39012)** *and* **Kwapisz, Marian, (80h:39005)**

Voss, Heinrich Existence and bounds for positive solutions of superlinear Uryson equations. **(80i:47075)**

45P05 Integral operators [See also 47Axx, 47Bxx, 47G05.]

Helton, Jon C. (*with* Stuckwisch, Stephen) An approximation technique for nonlinear integral operations. **80b:45026**

Pincus, Joel D. Symmetric singular integral operators with arbitrary deficiency. **80f:45024**

Stuckwisch, Stephen *See* **Helton, Jon C., 80b:45026**

Secondary classifications:

Aleksandrov, E. L. (*with* Kiričenko, B. I.) Spectral functions of Carleman integral operators with kernels that depend on the difference and on the sum of arguments. (Russian) **(80b:47060)**

Bogorodskaja, T. E. The density of the states of multidimensional integral operators. (Russian) **(80i:47069)**

Clerget, Michel *See* **Faurre, Pierre; et al., (80h:93041)**

Faurre, Pierre (*with* Clerget, Michel; Germain, François) ★Opérateurs rationnels positifs. **(80h:93041)**

Germain, François *See* **Faurre, Pierre; et al., (80h:93041)**

Kiričenko, B. I. *See* **Aleksandrov, E. L., (80b:47060)**

Kotljar, B. D. Singular numbers of integral operators. (Russian) **(80d:47078)**

Leitman, M. J. On plane waves propagating into a random fluid: asymptotic behavior. **(80m:76069)**

Prozorkevič, A. V. *See* **Zubarev, D. N.; et al., (80k:76082)**

Schwabik, Štefan (*with* Tvrdý, Milan) On linear problems in the space BV. **(80m:34013)**

Smoljanskiĭ, S. A. *See* **Zubarev, D. N.; et al., (80k:76082)**

Sunder, Vlakalathur Shankar Two characterization theorems for integral operators. **(80d:47079)**

Trifunović, Milomir Asymptotic behaviour of the spectral function of the integro-differential operator $L = B^{-1}A$. **(80i:34038)**

Tvrdý, Milan *See* **Schwabik, Štefan, (80m:34013)**

Xia, Dao Xing Non-normal operators. II. (Chinese) **(80g:47020)**

Zubarev, D. N. (*with* Prozorkevič, A. V.; Smoljanskiĭ, S. A.) Derivation of nonlinear generalized equations of quantum relativistic hydrodynamics. (Russian. English summary) **(80k:76082)**

46-XX FUNCTIONAL ANALYSIS {For manifolds modeled on topological linear spaces, see 57N20, 58Bxx.}

46-01 Elementary exposition, textbooks

Antonevič, A. B. (*with* Knjazev, P. N.; Radyno, Ja. V.) ★Задачи и упражнения по функциональному анализу. (Russian) [Problems and exercises in functional analysis] **80f:46001**

Cit'anaze, E. ★Mat'ematikuri analizis sap'uzvlegi p'unk'c'ionalur sivrc'eegli. (Georgian) [Principles of mathematical analysis in functional spaces] **80g:46001**

DeVito, Carl L. ★Functional analysis. **80d:46001**

(Fielder, Klaus) *See* **Ljusternik, L. A.; et al., 80b:46001**

(Gröger, Konrad) *See* **Ljusternik, L. A.; et al., 80b:46001**

Knjazev, P. N. *See* **Antonevič, A. B.; et al., 80f:46001**

(Krein, S. G.) *See* **Antonevič, A. B.; et al., 80f:46001**

Ljusternik, L. A. (*with* Sobolev, V. I.) ★Elemente der Funktionalanalysis. **80b:46001**

Page, Warren ★Topological uniform structures. **80c:46001**

Radyno, Ja. V. *See* **Antonevič, A. B.; et al., 80f:46001**

Sobolev, V. I. *See* **Ljusternik, L. A., 80b:46001**

Suhadolc, Anton ★Linearni topološki prostori. (Slovenian) [Linear topological spaces] **80f:46002**

Secondary classifications:

Bhatia, Rajendra (*with* Parthasarathy, Kalyanapuram Rangachari) ★Lectures on functional analysis. Part I. **(80d:47001)**

Gähler, Werner ★Grundstrukturen der Analysis. Band I. **(80f:58001a)**

★Grundstrukturen der Analysis. II. **(80f:58001b)**

Parthasarathy, Kalyanapuram Rangachari *See* **Bhatia, Rajendra, (80d:47001)**

Stakgold, Ivar ★Green's functions and boundary value problems. **(80h:35002)**

46-02 Advanced exposition (research surveys, monographs, etc.)

Secondary classifications:

Aupetit, Bernard Nouvelles méthodes analytiques dans la théorie des algèbres de Banach. **(80d:46093)**

van Dulst, D. ★Reflexive and superreflexive Banach spaces. **(80d:46019)**

Zahn, Peter ★Ein konstruktiver Weg zur Masstheorie und Funktionalanalysis. **(80c:03060)**

46-03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

(Hirschowitz, André) *See* **Martineau, André, (80h:01038)**

Martineau, André ★Oeuvres de André Martineau. **(80h:01038)**

Matuszewska, Wanda Władysław Orlicz: a review of his scientific work. **(80a:01035)**

(Orlicz, Władysław) *See* **Matuszewska, Wanda, (80a:01035)**

(Schwartz, Laurent) *See* **Martineau, André, (80h:01038)**

Weil, André ★Oeuvres scientifiques. Collected papers. Vol. I (1926–1951). **(80k:01067a)**

Bibliography:

Orlicz, Władysław *See* **Matuszewska, Wanda, (80a:01035)**

Weil, André *See* **Weil, André, (80k:01067a)**

Biography:

Martineau, André *See* **Martineau, André, (80h:01038)**

Orlicz, Władysław *See* **Matuszewska, Wanda, (80a:01035)**

Birthday:

Orlicz, Władysław *See* **Matuszewska, Wanda, (80a:01035)**

46-04 Explicit machine computation and programs (not the theory of computation or programming)

46-06 Proceedings, conferences, etc.

(Barroso, Jorge Alberto) *See* **Advances in holomorphy, 80a:46001**

(Béalian, Philippe) *See* **Journées: Analyse Non Linéaire, 80a:46002**

(Dimovski, Ivan Hr.) *See* **Generalized functions and operational calculus, 80f:46003**

(de la Harpe, Pierre) *See* **Algèbres d'opérateurs, 80g:46002**

(Krée, Paul) *See* **Séminaire: Paul Krée, 80j:46001**

(Nikol'skiĭ, S. M.) *See* **Studies in the theory of differentiable functions of several variables and its applications, 80e:46001**

(Robert, Jacques) *See* Journées: Analyse Non Linéaire, 80a:46002
Advances in holomorphy ★Advances in holomorphy. 80a:46001
Algèbres d'opérateurs ★Algèbres d'opérateurs. 80g:46002
Algèbres d'opérateurs et leurs applications en physique mathématique ★Algèbres d'opérateurs et leurs applications en physique mathématique. 80k:46001
Besançon *See* Journées: Analyse Non Linéaire, 80a:46002
Colloque:
Algèbres d'Opérateurs et leur Applications en Physique Mathématique *See* Algèbres d'opérateurs et leurs applications en physique mathématique, 80k:46001
Colloques Internationaux du Centre National de la Recherche Scientifique *See* Algèbres d'opérateurs et leurs applications en physique mathématique, 80k:46001
Conference:
Generalized Functions and Operational Calculus *See* Generalized functions and operational calculus, 80f:46003
Differentiable functions *See* Studies in the theory of differentiable functions of several variables and its applications, 80e:46001
Functional analysis *See* Séminaire: Analyse Fonctionnelle, 80k:46002
Functions of several variables *See* Studies in the theory of differentiable functions of several variables and its applications, 80e:46001
Generalized functions and operational calculus ★Generalized functions and operational calculus. 80f:46003
Hardy spaces *See* Linear operators on Hardy spaces, 80g:46003
Holomorphy *See* Advances in holomorphy, 80a:46001
Isomorphisms and unbounded derivations ★Isomorphisms and unbounded derivations. (Japanese) 80f:46004
Journées:
Analyse Non Linéaire ★Journées d'analyse non linéaire. 80a:46002
Kyoto *See* Isomorphisms and unbounded derivations, 80f:46004 *and* Linear operators on Hardy spaces, 80g:46003
Linear operators on Hardy spaces ★Linear operators on Hardy spaces. (Japanese) 80g:46003
Marseille *See* Algèbres d'opérateurs et leurs applications en physique mathématique, 80k:46001
Nonlinear analysis *See* Journées: Analyse Non Linéaire, 80a:46002
Operational calculus *See* Generalized functions and operational calculus, 80f:46003
Operator algebras *See* Algèbres d'opérateurs, 80g:46002 *and* Algèbres d'opérateurs et leurs applications en physique mathématique, 80k:46001
Operator algebras and their applications ★Operator algebras and their applications. (Japanese) 80i:46001
Partial differential equations *See* Séminaire: Paul Krée, 80j:46001
Plans-sur-Bex *See* Algèbres d'opérateurs, 80g:46002
Rio de Janeiro *See* Advances in holomorphy, 80a:46001
Séminaire:
Paul Krée ★Séminaire Paul Krée 4e année: 1977–1978. Équations aux dérivées partielles en dimension infinie. 80j:46001
Algèbres d'Opérateurs *See* Algèbres d'opérateurs, 80g:46002
Analyse Fonctionnelle ★Séminaire d'Analyse Fonctionnelle (1978–1979). 80k:46002
Seminar:
Holomorphy *See* Advances in holomorphy, 80a:46001
Studies in the theory of differentiable functions of several variables and its applications ★Исследования по теории дифференцируемых функций многих переменных и ее приложениям. VII. (Russian) [Studies in the theory of differentiable functions of several variables and its applications. VII] 80e:46001
Symposium:
Isomorphisms and Unbounded Derivations *See* Isomorphisms and unbounded derivations, 80f:46004
Linear Operators on Hardy Spaces *See* Linear operators on Hardy spaces, 80g:46003
Operator Algebras and their Applications *See* Operator algebras and their applications, 80i:46001
Unbounded derivations *See* Isomorphisms and unbounded derivations, 80f:46004
Varna *See* Generalized functions and operational calculus, 80f:46003

Secondary classifications:

(Baumgärtel, Hellmut) *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
(Fourman, Michael P.) *See* Applications of sheaves, (80j:18001)
(Lassner, Gerd) *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
(Mamedov, R. G.) *See* Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)
(Mulvey, Christopher J.) *See* Applications of sheaves, (80j:18001)
(Pietsch, Albrecht) *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
(Scott, Dana S.) *See* Applications of sheaves, (80j:18001)
(Šerstnev, A. N.) *See* Constructive theory of functions and functional analysis, (80d:00006)
(Ševrin, L. N.) *See* Studies in functional analysis, (80k:47001)
(Štraus, A. V.) *See* Functional analysis, (80j:47001)
(Uhlmann, A.) *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
(Weron, Aleksander) *See* Probability theory on vector spaces, (80c:60008)
Analyse non convexe ★Analyse non convexe. (80m:49001)
Analysis *See* Analyse non convexe, (80m:49001)
Applications of sheaves ★Applications of sheaves. (80j:18001)
Bull. Soc. Math. France Mem. *See* Analyse non convexe, (80m:49001)
Colloque:
Analyse non convexe *See* Analyse non convexe, (80m:49001)
Conference:
Operator Algebras, Ideals, and their Applications in Theoretical Physics *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
Probability Theory on Vector Spaces *See* Probability theory on vector spaces, (80c:60008)
Constructive theory of functions and functional analysis ★Конструктивная теория функций и функциональный анализ. (Russian) [The constructive theory of functions and functional analysis] (80d:00006)
Differential equations *See* Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)
Durham *See* Applications of sheaves, (80j:18001)
Functional analysis ★Функциональный анализ. Вып. 12. (Russian) [Functional analysis. No. 12] (80j:47001)
See also Constructive theory of functions and functional analysis, (80d:00006) *and* Studies in functional analysis, (80k:47001)
Leipzig *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
Nonconvex Analysis *See* Analyse non convexe, (80m:49001)
Operator algebras *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
Pau *See* Analyse non convexe, (80m:49001)
Probability theory on vector spaces ★Probability theory on vector spaces. (80c:60008)
Proceedings:
International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics ★Proceedings of the International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics. (80a:47002)
Sheaf theory *See* Applications of sheaves, (80j:18001)
Spectral theory *See* Functional analysis, (80j:47001)
Studies in functional analysis ★Исследования по функциональному анализу. (Russian) [Studies in functional analysis] (80k:47001)
Studies in some questions of the constructive theory of functions and differential equations ★Исследования по некоторым вопросам конструктивной теории функций и дифференциальных уравнений. (Russian) [Studies in some questions of the constructive theory of functions and differential equations] (80d:00021)
Symposium:
Applications of Sheaf Theory to Logic, Algebra and Analysis *See* Applications of sheaves, (80j:18001)
Theoretical physics *See* Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, (80a:47002)
Theory of functions *See* Constructive theory of functions and functional analysis, (80d:00006) *and* Studies in some questions of the constructive theory of functions and differential equations, (80d:00021)
Trzebieszowice *See* Probability theory on vector spaces, (80c:60008)
Vector spaces *See* Probability theory on vector spaces, (80c:60008)

46Axx Topological linear spaces

Husain, Taqdir (*with* Khaleelulla, S. M.) ★Barrelledness in topological and ordered vector spaces. 80e:46002
Khaleelulla, S. M. *See* Husain, Taqdir, 80e:46002

46A05 Locally convex spaces

Arosio, Alberto (*with* Mortola, S.) A characterization of compact sets in functional spaces. (Italian summary) 80b:46001
Debs, Gabriel Some general methods for constructing stable convex sets. 80i:46002
DeVito, Carl L. A note on sequential weak compactness. 80a:46003
Junek, Heinz Ein Verfahren zur Verfeinerung lokalkonvexer Topologie. (Russian and English summaries) 80a:46004
Khurana, Surjit Singh Dunford-Pettis property. 80b:46002
López Fernández-Asenjo, Félix (*with* Sanz Serna, Jesús M.ª) Local convergence of filters in locally convex spaces. (Spanish) 80d:46002
Mortola, S. *See* Arosio, Alberto, 80b:46001
Némethi, Csaba On almost sequential locally convex spaces. I. (Romanian summary) 80c:46002
Pochciał, Jan On the quasi-superlinear functionals. 80d:46003
Sanz Serna, Jesús M.ª *See* López Fernández-Asenjo, Félix, 80d:46002
Suarez, Manuel Certain properties of locally convex topologies. (Spanish) 80j:46002
Tsirulnikov, Bella On the locally convex noncomplete quasi-distinguished spaces. (French summary) 80j:46003

Secondary classifications:

Alexiewicz, Andrzej Linear algebras with the topology of Roelcke. (80k:46052)
Beattie, Ronald On the convergence vector space $\mathfrak{L}_c(E, F)$ and its dual space. (80b:47058)
Fehr, Edwin (*with* Jarchow, Hans) Folgenräume als universelle Generatoren für Klassen lokalkonvexer Räume. (English summary) (80e:46006)
Jarchow, Hans *See* Fehr, Edwin, (80e:46006)
Korobeĭnik, Ju. F. The problem of moments, of interpolation and of being a basis. (Russian) (80g:46034)
Köthe, Gottfried Bounded and compact subsets of ε-tensor products of locally convex spaces. (80d:46122)
Mertins, Ulrich Eigenschaften stetiger Endomorphismen, die mit beschränkten kommutieren. (80a:47010)
Page, Warren ★Topological uniform structures. (80c:46001)

46A06 Metrizable topological linear spaces and their duals (F-, DF-spaces, etc.)

Mankiewicz, Piotr Fat equicontinuous groups of homeomorphisms of linear topological

spaces and their application to the problem of isometries in linear metric spaces. **80g:46004**

Okazaki, Yoshiaki L^0-embedding of a linear metric space. **80k:46003**

Zafarani, Jafar On compact subsets of quotient spaces. **80c:46003**

Secondary classifications:

Turpin, Philippe Fubini inequalities and bounded multiplier property in generalized modular spaces. **(80b:46044)**

46A07 Barrelled spaces

Dierolf, Peter (*with* Dierolf, Susanne; Drewnowski, Lech) Remarks and examples concerning unordered Baire-like and ultrabarrelled spaces. **80c:46004**

Dierolf, Susanne *See* **Dierolf, Peter; et al., 80c:46004**

Drewnowski, Lech *See* **Dierolf, Peter; et al., 80c:46004**

Khaleelulla, S. M. Bases in sequentially barrelled spaces. **80i:46003**

Kiran, Usha Some properties inherited by countable codimensional subspaces of locally convex spaces. **80k:46004**

Perepečaĭ, Ĭ. Ĭ. M-barrelled topological M-spaces. (Russian) **80d:46004**

Various generalizations of the notion of "barreledness" in topological M-spaces. (Russian) **80k:46005**

Popoola, J. O. (*with* Tweddle, I.) Density character, barrelledness and the closed graph theorem. **80j:46004**

Radenović, Stojan Sur deux classes d'espaces localement convexes. **80c:46005**

Sur une propriété de permanence de certaines classes d'espaces localement convexes. **80i:46004**

Snipes, Ray F. S-barrelled topological vector spaces. **80d:46005**

Tweddle, I. *See* **Popoola, J. O., 80j:46004**

Secondary classifications:

Marquina, A. (*with* Sanz Serna, Jesús M.ª) Barrelledness conditions on $c_0(E)$. **(80i:46010)**

Sanz Serna, Jesús M.ª *See* **Marquina, A., (80i:46010)**

46A09 Bornological spaces

Kumar, Rohtash Analogue of open mapping theorem in the theory of bounded structures. **80b:46003**

Tsirulnikov, Bella Sur les topologies tonnelées et bornologiques associées à une topologie d'espace localement convexe. (English summary) **80b:46004**

Villamaria, Manuel-Antonio Fugarolas Bases absolues dans les bornologies nucléaires et applications. (English summary) **80c:46006**

Secondary classifications:

Radenović, Stojan Sur les espaces tonnelés et bornologiques. **(80j:46009)**

Valdivia, Ureña, Manuel On the space $\mathcal{D}(\Omega)$. **(80a:46020)**

46A10 Locally bounded topological linear spaces

Kalton, Nigel The three space problem for locally bounded F-spaces. **80j:46005**

Secondary classifications:

Jevtić, M. The space u^p, $0<p<1$, is not locally convex linear topological space. **(80j:46040)**

46A12 Spaces defined by special inductive or projective limits (LF-, nuclear, Schwartz, Silva spaces, etc.) [See also 46M10, 46M40.]

Berner, Paul D. Convolution operators and surjective limits. **80h:46002**

Chi, Dong Pyo (*with* Cho, Tae Geun; Kim, Jongsik) Surjectivity of the transposed map. **80k:46006**

Cho, Tae Geun *See* **Chi, Dong Pyo; et al., 80k:46006**

John, K. (*with* Zizler, V.) On a tensor product characterization of nuclearity. **80i:46005**

Kim, Jongsik *See* **Chi, Dong Pyo; et al., 80k:46006**

Moscatelli, V. B. On the existence of universal λ-nuclear Fréchet spaces. **80g:46005**

Ramanujan, M. S. (*with* Rosenberger, B.) On the Djakov-Mitiagin example of a nuclear Fréchet space without basis. (Russian summary) **80m:46001**

Rosenberger, B. *See* **Ramanujan, M. S., 80m:46001**

Terzioğlu, T. On varieties containing Schwartz spaces. (Turkish summary) **80h:46003**

Valdivia Ureña, Manuel Solution of a problem of Grothendieck. **80g:46006**

Zarnadze, D. N. Approximate compactness in some locally convex spaces. (Russian) **80j:46006**

Zizler, V. *See* **John, K., 80i:46005**

Secondary classifications:

Bierstedt, Klaus-Dieter A question on inductive limits of weighted locally convex function spaces. **(80k:46023)**

Colombeau, Jean-François (*with* Meise, Reinhold) Strong nuclearity in spaces of holomorphic mappings. **(80j:46072)**

Meise, Reinhold *See* **Colombeau, Jean-François, (80j:46072)**

Petzsche, Hans-Joachim Die Nuklearität der Ultradistributionsräume und der Satz vom Kern. I. (English summary) **(80f:46045a)**

Die Nuklearität der Ultradistributionsräume und der Satz vom Kern. II. (English summary) **(80f:46045b)**

46A14 Spaces defined by compactness properties (Montel spaces, etc.)

46A15 Other topological linear spaces

de Branges, Louis Vectorial topology. **80j:46007**

Dierolf, Peter Summable sequences and associated Orlicz-Pettis topologies. **80k:46007**

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46A20 Duality theory

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46A22 Extension and lifting of functionals and operators [See also 46M10.]

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46A25 Reflexivity and semi-reflexivity

Radenović, Stojan Sur un type de la réflexivité d'espaces localement convexes. **80j:46010**

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46A30 Open mapping and closed graph theorems and completeness (including B-, B_r-completeness)

Dierolf, Susanne *See* **Eberhardt, Volker, 80c:46004**

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theorem holds. (Russian. English summary) **80k:46009**

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46A32 Spaces of linear operators

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46A35 Summability and bases

Abasin, A. V. On the question whether a system of elements forms a basis in the completion of its linear hull. (Russian) **80k:46010**

Čalov, P. A. Linear topological invariants and the quasi-equivalence of bases in families of Hilbert spaces. (Russian) **80h:46006**

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(*with* Gupta, Manjul) Weak Schauder bases and completeness. **80a:46005**

(*with* Gupta, Manjul) Several notions of absolute bases. **80b:46007**

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46A40 Ordered topological linear spaces, vector lattices [See also 06F20, 46B30.]

Abramovič, Ju. A. (*with* Buhvalov, A. V.; Geller, V. A.) The weak topology in vector lattices. (Russian) **80j:46013**

Akilov, G. P. (*with* Kutateladze, S. S.) ★Упорядоченные векторные пространства. (Russian) [Ordered vector spaces] **80f:46007**

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46A45 Sequence spaces (including Köthe sequence spaces)

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Petzsche, Hans-Joachim Die Nuklearität der Ultradistributionsräume und der Satz vom Kern. I. (English summary) **80f:46045a**
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Wong, C. K. *See* **Coppersmith, D.**; et al., **80l:68030**

46A50 Compactness in topological linear spaces

46A55 Convexity, Choquet theory [See also 52A07.]

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46A99 None of the above, but in this section

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Gwinner, Joachim *See* **Bair, Jacques**, **80a:46011**

Ha, Chung Wei On systems of convex inequalities. **80j:46026**

Hudzik, Henryk (*with* Musielak, Julian; Urbański, Ryszard) Lattice properties of the space of convex, closed and bounded subsets of a topological vector space. (Russian summary) **80j:46027**

Jindal, Sushma *See* **Rani, Kusum**, **80h:46014**

Kalton, Nigel An analogue of the Radon-Nikodým property for nonlocally convex quasi-Banach spaces. **80h:46013**

López Molina, J. A. (*with* López Pellicer, M.) On the existence of regular T^J topologies. (Spanish. English summary) **80m:46013**

López Pellicer, M. *See* **López Molina, J. A.**, **80m:46013**

Mil'man, D. P. On the set of minimal extensions of a subadditive functional. **80l:46013**

Musielak, Julian *See* **Hudzik, Henryk**; et al., **80j:46027**

Penot, Jean-Paul (*with* Théra, Michel) Polarité des applications convexes à valeurs vectorielles. (English summary) **80l:46014**

Rani, Kusum (*with* Jindal, Sushma) A note on varieties generated by Hilbert spaces. **80h:46014**

Thämelt, Wolfgang Extrema linearer Funktionale auf Ordnungsintervallen. **80d:46018a**
Ein Dualitätssatz für lineare Optimalprobleme auf Ordnungsintervallen. **80d:46018b**
Struktureigenschaften linearer Optimalprobleme auf Ordnungsintervallen. **80d:46018c**

Théra, Michel *See* **Penot, Jean-Paul**, **80l:46014**

Urbański, Ryszard *See* **Hudzik, Henryk**; et al., **80j:46027**

Secondary classifications:

Albrecht, Ernst (*with* Neumann, Michael) Über die Stetigkeit von dissipativen linearen Operatoren. **80f:47030**

Assouad, Patrice Produit tensoriel, distances extrémales et réalisation de covariances. (English summary) **80e:46030**

Becker, Richard Some consequences of a kind of Hahn-Banach's theorem. **80g:28013**

Benderskiĭ, O. Ja. Interior topologies in l-groups and K-lineals. (Russian. English summary) **80l:54047**

Burgess, D. C. J. (*with* Fitzpatrick, M.) Locally convex syntopogenous spaces. **80c:54002**

Diaulusie, Charles (*with* White, Albert) Some geometric remarks concerning strictly 2-convex spaces. **80b:52003**

Drewnowski, Lech Any two norms are somewhere comparable. **80j:46039**

Fitzpatrick, M. *See* **Burgess, D. C. J., (80c:54002)**
Kiselman, Christer O. Plurisubharmonic functions and plurisubharmonic topologies. **(80k:31005)**
Mauzi, P. An outline of vector graphs and conditional Banach spaces. **(80d:46038)**
Mironov, A. V. (*with* Sarymsakov, B. T.) Some properties of positive mappings of topological semi-ordered groups and vector spaces. (Russian) **(80k:47039)**
Neumann, Michael *See* **Albrecht, Ernst, (80f:47030)**
Ng, Kung Fu Invariant measures for compact affine semi-groups. **(80b:28014)**
Radó, F. A generalization of the valued vector space. **(80c:12029)**
Sarymsakov, B. T. *See* **Mironov, A. V., (80k:47039)**
Soltan, P. S. *See* **Soltan, V. P., (80j:52001)**
Soltan, V. P. (*with* Soltan, P. S.) *d*-convex functions. (Russian) **(80j:52001)**
Turpin, Philippe Properties of Orlicz-Pettis or Nikodým type and barrelledness conditions. (French summary) **(80d:46080)**
White, Albert *See* **Diminnie, Charles, (80b:52003)**

46Bxx Normed linear spaces and Banach spaces {For function spaces, see 46Exx.}

46B05 Topology in terms of the norms

Godini, G. On suns. **80a:46012**
John, K. (*with* Zizler, V.) A short proof of a version of Asplund's norm averaging theorem. **80b:46020**
Tomczak-Jaegermann, Nicole On the Banach-Mazur distance between symmetric spaces. (Russian summary) **80j:46028**
Zizler, V. *See* **John, K., 80b:46020**

Secondary classifications:

Gutman, S. M. Homeomorphisms of nonseparable *B*-spaces. I. (Russian) **(80b:57011)**
Valdivia Ureña, Manuel Some notes on convex sets. **(80j:46024)**

46B10 Duality and reflexivity

Armstrong, Thomas E. Infinite dimensional *L*-spaces do not have preduals of all orders. **80b:46021**
Asimow, L. Interpolation in Banach spaces. **80b:46015**
van Dulst, D. ★Reflexive and superreflexive Banach spaces. **80d:46019**
A characterization of super-reflexivity. (Russian summary) **80c:46017**
Fonf, V. P. A necessary and sufficient condition for reflexivity of a *B*-space in terms of the extreme points of its unit ball. (Russian) **80c:46018**
Fowler, Peter A. Correction of a generalization of a theorem of Beurling and Livingston. **80b:46022**
Godefroy, Gilles Épluchabilité et unicité du prédual. **80d:46020**
Godun, B. V. Weak* derivatives of sets of linear functionals. (Russian) **80c:46019**
Johnson, Jerry A. (*with* Wolfe, John) On the norm of the canonical projection of E^{***} onto $E^{\perp}$. **80g:46013**
Kadec', M. Ĭ. The superreflexivity condition for a Banach space in terms of the proximity of its finite-dimensional spaces to Euclidean spaces. (Russian) **80d:46021**
Kisljakov, S. V. Isomorphisms and projections for factor-spaces of ℓ^1-spaces with respect to their reflexive subspaces. (Russian. English summary) **80d:46022**
Maltese, George A remark on the existence of nonannihilating vectors and functionals in normed spaces. (Italian summary) **80m:46014**
Rosenthal, Haskell P. Some recent discoveries in the isomorphic theory of Banach spaces. **80d:46023**
Wolfe, John *See* **Johnson, Jerry A., 80g:46013**

Secondary classifications:

Brown, H. I (*with* Cass, F. P.; Robinson, I. J. W.) On isomorphisms between certain subalgebras of $B(X)$. **(80a:47073)**
Cass, F. P. *See* **Brown, H. I; et al., (80a:47073)**
Hada, Ichiro (*with* Hashimoto, Kazuo; Ôharu, Shinnosuke) On the duality mapping of l^{∞}. **(80j:46020)**
Hashimoto, Kazuo *See* **Hada, Ichiro; et al., (80j:46020)**
Miličić, Pavle M. Sur la comparaison des normes d'opérateurs. **(80h:47009)**
Ôharu, Shinnosuke *See* **Hada, Ichiro; et al., (80j:46020)**
Robinson, I. J. W. *See* **Brown, H. I; et al., (80a:47073)**
Semenov, P. V. James-Orlicz spaces. (Russian) **(80k:46042)**

46B15 Summability and bases

Beauzamy, Bernard Factorisation des propriétés de Banach-Saks. **80m:46015**
Capon, Michèle Sur la primarité de certains espaces de Banach. (English summary) **80f:46009a**
Sur la primarité de certains espaces de Banach. (English summary) **80f:46009b**
Gordon, Y. (*with* Loewy, R.) Uniqueness of (Δ) bases and isometries of Banach spaces. **80b:46016**
Halmos, Paul Richard Schauder bases. **80j:46029**
Kostyrko, Pavel A characteristic property of Banach spaces. (Slovak and Russian summaries) **80g:46014**
Kvaratskelija, V. V. Unconditional convergence in a Banach space. (Russian. Georgian and English summaries) **80g:46015**
Lapresté, Jean-Thierry Extraction de sous-suites "presque inconditionnelles". (English summary) **80i:46015**
Loewy, R. *See* **Gordon, Y., 80b:46016**
Maurey, Bernard Construction de suites symétriques. (English summary) **80c:46020**
Plíčko, A. M. The existence of a bounded *M*-basis in a weakly compactly generated space. (Russian) **80k:46020**
Saphar, P. Sur les sous-espaces des espaces de Banach à base inconditionnelle d'après Feder. **80d:46024**
Schütt, Carsten The projection constant of finite-dimensional spaces whose unconditional basis constant is 1. **80a:46013**
Terenzi, Paolo Markuschevich bases and quasicomplementary subspaces in Banach spaces. (Italian summary) **80c:46021**
On the structure, in a Banach space, of the sequences without an infinite basic subsequence. (Italian summary) **80d:46025**
Some completeness properties of general sequences in a Banach space. (Italian summary) **80d:46026**
Biorthogonal systems in Banach spaces. (Italian summary) **80g:46016**

Secondary classifications:

Andrew, Alfred D. A remark on generalized Haar systems in L_p, $1<p<\infty$. **(80k:46027)**
Kivinukk, A. Comparison theorems for summation processes of Fourier expansions in a Banach space. (Russian. Estonian and English summaries) **(80j:42005)**
Maurey, Bernard (*with* Schechtman, G.) Some remarks on symmetric basic sequences in L_1. **(80c:46039)**
Nikol'skiĭ, N. K. Bases of invariant subspaces and operator interpolation. (Russian) **(80b:47021)**
Schechtman, G. *See* **Maurey, Bernard, (80c:46039)**

46B20 Geometry and structure

Amir, Dan Chebyshev centers and uniform convexity. **80h:46017**
Beauzamy, Bernard Projections contractantes dans les espaces de Banach. **80b:46023**
Propriété de Banach-Saks et modèles étalés. **80f:46010**
Bellenot, Steven F. Factorization of compact operators and finite representability of Banach spaces with applications to Schwartz spaces. **80b:46024**
Bourgain, Jean A geometric characterization of the Radon-Nikodým property in Banach spaces. **80h:46018**
Bourgin, D. G. Two-dimensional ϵ-isometries. **80d:46027**
Cambern, Michael Reflexive spaces with the Banach-Stone property. **80a:46014**
Capon, Michèle Sous-espaces complémentés de $L^p(0, 1)$. **80g:46017**
Primarité de $L^p(l_r)$, où $1<p, r<\infty$. (English summary) **80f:46011**
Cobzaş, S. Antiproximinal sets in Banach spaces of c_0-type. **80f:46012**
Davis, William J. (*with* Maurey, Bernard) The distance of a symmetric space from some l_p space. **80f:46013**
van Dulst, D. Flat spots on unit spheres. **80h:46019**
(*with* Schäffer, Juan Jorge) Two examples of flat spots in nonflat Banach spaces. **80h:46020**
Figiel, T. Lattice norms and the geometry of Banach spaces. **80f:46014**
Fonf, V. P. The massiveness of the set of extreme points of the conjugate ball of a Banach space and polyhedral spaces. (Russian) **80g:46019**
Massiveness of the set of extremal points of the unit sphere of some conjugate Banach spaces. (Russian) **80g:46018**
A property of Lindenstrauss-Phelps spaces. (Russian) **80c:46022**
(Franchetti, Carlo) *See* **Pethe, P. V.; et al., 80b:46028**
Giles, J. R. Strong differentiability of the norm and rotundity of the dual. **80h:46021**
(*with* Gregory, D. A.; Sims, Brailey) Geometrical implications of upper semi-continuity of the duality mapping on a Banach space. **80b:46025**
Godefroy, Gilles Une remarque sur les isomorphismes entre $l^{\infty}(\mathbf{N})$ et $L^{\infty}([0, 1]; dx)$. **80f:46015a**
Quelques remarques sur la propriété (C) des espaces de Banach. **80f:46015b**
Godun, B. V. (*with* Kadec', M. Ĭ.) The set of values of the characteristic of the subspaces of a conjugate space. (Russian) **80c:46023**
Gregory, D. A. *See* **Giles, J. R.; et al., 80b:46025**
Hebsgaard, Thomas ★Linear liftings. **80b:46026**
Hennefeld, Julien *M*-ideals, HB-subspaces, and compact operators. **80j:46030**
Smooth, compact operators. **80k:46021**
Ho, Aggie The Radon-Nikodým property and weighted trees in Banach spaces. **80f:46016**
Istrăţescu, Ioana *See* **Istrăţescu, Vasile I., 80h:46022**
Istrăţescu, Vasile I. (*with* Istrăţescu, Ioana) On complex strictly convex spaces. I. **80h:46022**
On complex strictly convex spaces. II. **80m:46016**
James, R. C. Nonreflexive spaces of type 2. **80c:46024**
John, K. (*with* Zizler, V.) On rough norms on Banach spaces. **80d:46028**
Kadec', M. Ĭ. *See* **Godun, B. V., 80c:46023**
Keener, L. On smoothness and proximal points. **80c:46025**
Kolomý, Josef (*with* Viet, H. D.) On duality mappings and metric gradient. (Italian summary) **80d:46029**
Krivine, Jean-Louis Constantes de Grothendieck et fonctions de type positif sur les sphères. **80c:46026**
(*with* Maurey, Bernard) Espaces de Banach stables. (English summary) **80k:46022**
Larman, D. G. On a conjecture of Lindenstrauss and Perles in at most 6 dimensions. **80c:46027**
(*with* Phelps, R. R.) Gâteaux differentiability of convex functions on Banach spaces. **80m:46017**
Lusky, Wolfgang Separable Lindenstrauss spaces. **80g:46020**
On a construction of Lindenstrauss and Wulbert. **80c:46028**
Maurey, Bernard *See* **Davis, William J., 80f:46013** *and* **Krivine, Jean-Louis, 80k:46022**
Meshkov, V. Z. Smoothness properties in Banach spaces. **80b:46027**
Miličić, Pavle M. Sur le complément orthogonal du sous-espace fermé d'un espace vectoriel normé. **80g:46021**
Milman, V. D. (*with* Sharir, M.) Shrinking minimal systems and complementation of l_p^n-spaces in reflexive Banach spaces. **80j:46031**
Nanda, Sudarsan Simultaneous farthest points in normed linear spaces. **80d:46030**
Odinec, V. P. Minimal projections. Uniqueness conditions. (Russian) **80c:46029**

Pethe, P. V. (*with* Thakare, Nimbakrishna) Remarks on: "Admissible sets in Banach spaces" (Rev. Roumaine Math. Pures Appl. **18** (1973), 25–31) by C. Franchetti. **80b:46028**
Phelps, R. R. *See* **Larman, D. G., 80m:46017**
Pisier, Gilles Some results on Banach spaces without local unconditional structure. **80e:46012**
Reinov, O. I. Some classes of sets in Banach spaces and the topological characterization of operators of type RN. (Russian. English summary) **80d:46031**
Rogalski, Marc Que sont les facteurs directs des espaces de Banach classiques? I. Les espaces de Banach autres que les $L^p(\mu)$. **80i:46016**
Rolewicz, Stefan On convex sets containing only points of support. **80b:46029**
Ryan, Raymond A. Dunford-Pettis properties. (Russian summary) **80m:46018**
Sastry, Sundaram M. A. *See* **Srinivasan, Sundarajan, 80i:46017**
Schäffer, Juan Jorge *See* **van Dulst, D., 80h:46020**
Senechalle, David A. Measuring flatness in linear spaces. **80b:46030**
Sharir, M. *See* **Milman, V. D., 80j:46031**
Sims, Brailey *See* **Giles, J. R.; et al., 80b:46025**
Singer, Ivan On the distance of non-reflexive spaces to the collection of all conjugate spaces. **80b:46031**
Smith, Mark A. A reflexive Banach space that is LUR and not 2R. **80d:46032**
Srinivasan, Sundarajan (*with* Sastry, Sundaram M. A.) A sufficient condition for a subspace to be proximinal. **80i:46017**
Sullivan, Francis E. A generalization of uniformly rotund Banach spaces. **80h:46023**
Szankowski, A. Subspaces without the approximation property. **80b:46032**
Talagrand, Michel Une classe d'espaces de Banach qui admettent des quotients séparables. **80d:46034**
Espaces de Banach faiblement $\mathcal{K}$-analytiques. **80j:46032**
Comparaison des boreliens d'un espace de Banach pour les topologies fortes et faibles. **80d:46033**
Teodorescu, Radu I. On the smoothness of a space. (Romanian. English summary) **80j:46033**
Thakare, Nimbakrishna *See* **Pethe, P. V., 80b:46028**
Tomczak-Jaegermann, Nicole The Banach-Mazur distance between the trace classes $\mathfrak{C}_p^n$. **80f:46017**
Viet, H. D. *See* **Kolomý, Josef, 80d:46029**
Woyczyński, Wojbor A. Geometry and martingales in Banach spaces. II. Independent increments. **80d:46035**
Yorke, A. C. Locally uniformly rotund norms and Markuschevich bases. **80j:46034**
Yost, David T. Best approximation and intersections of balls in Banach spaces. **80m:46019**
Živkov, N. V. Metric projections and antiprojections in strictly convex normed spaces. **80f:46018**
Zizler, V. *See* **John, K., 80d:46028**

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Andreev, V. I. Continuity of the metric projection and approximate compactness of subspaces in $L_1(S, \Sigma, \mu)$. (Russian) **(80m:41021)**
Beauzamy, Bernard ★Espaces d'interpolation réels: topologie et géométrie. **(80k:46080)**
Berdyšev, V. I. Uniform continuity of the metric projection and of the ν-projection. (Russian) **(80m:41022)**
van Dulst, D. A characterization of super-reflexivity. (Russian summary) **(80c:46017)**
Eggbe, L. On the Radon-Nikodým property, and related topics in locally convex spaces. **(80d:46078)**
Ellis, Alan J. ★Topics in Banach spaces of continuous functions. **(80h:46032)**
Ho Duc Viet (*with* Nguyen Thiep) A note on close-to-normal structure. **(80j:47069)**
Kalton, Nigel The three space problem for locally bounded F-spaces. **(80j:46005)**
Koščeev, V. A. Connectedness and "sun" properties of sets in Banach spaces. (Russian) **(80e:41017)**
Koiero, M. V. Preconvex sets in linear normed spaces. (Russian. English summary) **(80d:52002)**
Lima, Asvald Intersection properties of balls in spaces of compact operators. **(80g:47048)**
Makarov, B. M. A characterization of Hilbert space. (Russian) **(80m:46021)**
Michor, Peter W. ★Functors and categories of Banach spaces. **(80h:46116)**
Nguyen Thiep *See* **Ho Duc Viet, (80j:47069)**
Papini, P. L. Sheltered points in normed spaces. **(80j:41061)**
Samarskiĭ, V. G. The construction of an operator ideal by means of Bernšteĭn's s-numbers. (Russian. English summary) **(80c:47036)**
Samuel, C. Primarité des produits d'espaces de suites. **(80c:46016)**
Šangua, A. G. Laws of large numbers in a Banach space. (Russian. Georgian and English summaries) **(80h:60015)**
Smith, Mark A. (*with* Turett, Barry) Rotundity in Lebesgue-Bochner function spaces. **(80m:46031)**
Turett, Barry *See* **Smith, Mark A., (80m:46031)**
Waelbroeck, Lucien Les quotients banachiques. (English summary) **(80a:46043)**

46B22 Spaces with Radon-Nikodým property [See also 46G10.]

Lust-Piquard, F. Propriétés géométriques des sous-espaces invariants par translation de $L^1(G)$ et $C(G)$. **80h:46024**

Secondary classifications:

(Edgar, G. A.) *See* **Mankiewicz, Piotr, (80d:46015)**
Ghoussoub, Nassif (*with* Talagrand, Michel) Order dentability and the Radon-Nikodým property in Banach lattices. **(80j:46036)**
Kalton, Nigel An analogue of the Radon-Nikodým property for nonlocally convex quasi-Banach spaces. **(80h:46013)**
Mankiewicz, Piotr A remark on Edgar's extremal integral representation theorem. **(80d:46015)**
Musial, Kazimierz The weak Radon-Nikodým property in Banach spaces. **(80h:46065)**
Talagrand, Michel *See* **Ghoussoub, Nassif, (80j:46036)**

46B25 Classical Banach spaces in the general theory

Alspach, Dale E. Quotients of c_0 are almost isometric to subspaces of c_0. **80j:46035**
Haydon, Richard On dual L^1-spaces and injective bidual Banach spaces. **80e:46013**

Secondary classifications:

Cambern, Michael On L^1 isomorphisms. **(80j:46045)**
Guerre, S. Procédé de convergence minimale dans les espaces de Banach. Une loi des grands nombres et un théorème ergodique. **(80j:60019)**
Pisier, Gilles Topics on Grothendieck's theorem. **(80j:47026)**
Grothendieck's theorem for noncommutative C^*-algebras, with an appendix on Grothendieck's constants. **(80j:47027)**

46B30 Banach lattices [See also 46A40.]

Abramovič, Ju. A. (*with* Posicel'skiĭ, E. D.; Janovskiĭ, L. P.) On some parameters associated with normed lattices and on series characterisation of M-spaces. **80e:46014**
Bukvalov, A. V. (*with* Veksler, A. I.; Lozanovskiĭ, G. Ja.) Banach lattices — some Banach aspects of the theory. (Russian) **80f:46019**
Ghoussoub, Nassif (*with* Talagrand, Michel) Order dentability and the Radon-Nikodým property in Banach lattices. **80j:46036**
Godefroy, Gilles Sur les cônes réticules analytiques. **80g:46022**
Étude topologique des éléments du bidual de certains espaces de Banach. Applications. (English summary) **80e:46030**
Heinich, Henri Sur les mesures vectorielles signées. (English summary) **80j:46037**
Janovskiĭ, L. P. Summing, order summing operators and the characterization of AL-spaces. (Russian) **80h:46025**
See also **Abramovič, Ju. A.; et al., 80e:46014**
Kaljser, Sten Some representation theorems for Banach lattices. **80f:46020**
Krivine, Jean-Louis Constantes de Grothendieck et fonctions de type positif sur les sphères. **80e:46015**
Kühn, Burkhard Banachverbände mit ordnungsstetiger Dualnorm. **80e:46016**
Lotz, Heinrich P. (*with* Rosenthal, Haskell P.) Embeddings of $C(\Delta)$ and $L^1[0, 1]$ in Banach lattices. **80g:46023**
Lozanovskiĭ, G. Ja. *See* **Bukvalov, A. V.; et al., 80f:46019**
Pisier, Gilles Some applications of the complex interpolation method to Banach lattices. **80m:46020**
Popa, Nicolae Complemented sublattices in l_p, $0<p<1$, and an extension of Ando's theorem. **80f:46021**
Posicel'skiĭ, E. D. *See* **Abramovič, Ju. A.; et al., 80e:46014**
Rosenthal, Haskell P. *See* **Lotz, Heinrich P., 80g:46023**
Talagrand, Michel Une remarque sur les espaces de Banach réticulés. **80d:46036**
Sur la propriété de Radon-Nikodým dans les espaces de Banach réticulés. (English summary) **80e:46017**
See also **Ghoussoub, Nassif, 80j:46036**
Tsekrekos, Panayotis C. Some applications of the L-constants and M-constants on Banach lattices. **80d:46037**
Veksler, A. I. *See* **Bukvalov, A. V.; et al., 80f:46019**
Wolff, Manfred On C_0-semigroups of lattice homomorphisms on a Banach lattice. **80h:46026**

Secondary classifications:

Ahmad, Shair (*with* Lazer, Alan C.) Positive operators and Sturmian theory of nonselfadjoint second-order systems. **(80m:34027)**
Claas, W. J. (*with* Zaanen, A. C.) Orlicz lattices. **(80b:46010)**
Herrmann, Horst (*with* Kerstan, Johannes; Liese, Friedrich) o-stetige Masse und asymptotische Gleichverteilung. **(80m:60015)**
Kerstan, Johannes *See* **Herrmann, Horst; et al., (80m:60015)**
Lazer, Alan C. *See* **Ahmad, Shair, (80m:34027)**
Liese, Friedrich *See* **Herrmann, Horst; et al., (80m:60015)**
Scheffold, Egon Fixräume regulärer Operatoren und ein Korovkin-Satz. (English summary) **(80b:47049)**
Soardi, Paolo M. Existence of fixed points of nonexpansive mappings in certain Banach lattices. **(80c:47051)**
Zaanen, A. C. *See* **Claas, W. J., (80b:46010)**

46B99 None of the above, but in this section

Bhola, H. L. A note on nearest point. (Hindi. English summary) **80h:46027**
Brown, A. L. The Borsuk-Ulam theorem and orthogonality in normed linear spaces. **80j:46038**
Drewnowski, Lech Any two norms are somewhere comparable. **80j:46039**
Gribanov, Ju. I. (*with* Navodnov, V. G.) The smallest Banach space of a certain class, containing a given normed space. (Russian) **80e:46018**
Josefson, Bengt Convex coverings of $l^\infty(A)$. **80g:46024**
Masani, P. An outline of vector graphs and conditional Banach spaces. **80d:46038**
Mustăţa, Costică Norm preserving extension of starshaped Lipschitz functions. **80c:46031**
Navodnov, V. G. *See* **Gribanov, Ju. I., 80e:46018**
Shelah, Saharon A Banach space with few operators. **80h:46033**
Stern, Jacques Le groupe des isométries d'un espace de Banach. (English summary) **80f:46022**

Secondary classifications:

Andrew, Alfred D. On subsequences of the Haar system in $C(\Delta)$. **(80d:46048)**

Brewer, M. (*with* Marshall, Ch. D.) Banachian differentiable spaces. **(80b:58010)**
Cook, Thurlow A. The geometry of generalized quantum logics. **(80k:81009)**
Gribanov, Ju. I. (*with* Matevosjan, R. H.) Completion of normed spaces. (Russian) **(80c:46041)**
Huet, Denise Approximation d'un espace de Banach et perturbations singulières. (English summary) **(80i:41031)**
Marshall, Ch. D. *See* **Brewer, M., (80b:58010)**
Matevosjan, R. H. *See* **Gribanov, Ju. I., (80c:46041)**
Pethe, P. V. (*with* Thakare, Nimbakrishna) Applications of Riesz representation theorem in semi-inner product spaces. **(80d:46042)**
Potocký, Rastislav The strong law of large numbers for o-convergent random variables. (Russian summary) **(80c:60017)**
Rätz, Jürg Quadratic functionals satisfying a subsidiary inequality. **(80k:39004)**
van Rooij, A. Convexity on p-adic Banach spaces. **(80i:46061)**
Shelah, Saharon (*with* Stern, Jacques) The Hanf number of the first order theory of Banach spaces. **(80a:03047)**
Stegall, Charles Optimization of functions on certain subsets of Banach spaces. **(80a:46022)**
Stern, Jacques *See* **Shelah, Saharon, (80a:03047)**
Talagrand, Michel Est-ce que l^∞ est un espace mesurable? (English summary) **(80k:03056)**
Deux généralisations d'un théorème de I. Namioka. **(80k:54018)**
Thakare, Nimbakrishna *See* **Pethe, P. V., (80d:46042)**
Vlasov, L. P. The uniqueness of generalized elements of best approximation. (Russian) **(80j:41065)**
Zajíček, Luděk On the points of multivaluedness of metric projections in separable Banach spaces. **(80b:41010)**
Ždanok, T. A. A probabilistic analogue of the Hahn-Banach theorem and its application to the investigation of random operator equations. (Russian. English summary) **(80f:60060)**

46Cxx Inner product spaces, Hilbert spaces {For function spaces, see 46Exx.}

46C05 Geometry and topology of the spaces

Amir, Dan (*with* Deutsch, Frank) Another approximation theoretic characterization of inner product spaces. **80d:46039**
Bosznay, Adam P. A remark on the linearity of metric projections. **80d:46040**
Carlson, John W. (*with* Hicks, Troy L.) A characterization of inner product spaces. **80b:46034**
Delbosco, Domenico Normed spaces with an inner product. (Italian. English summary) **80g:46025**
Deutsch, Frank *See* **Amir, Dan, 80d:46039**
Dovbyš, L. N. (*with* Nikol'skiĭ, N. K.; Sudakov, V. N.) How good can a nonhereditarily complete family be? (Russian. English summary) **80d:46041**
Fowler, Northrup, III Elementary counterexamples in infinite dimensional inner product spaces. **80b:46035**
Hicks, Troy L. *See* **Carlson, John W., 80b:46034**
Kapoor, O. P. (*with* Prasad, Jagadish) Orthogonality and characterizations of inner product spaces. **80b:46028**
Makarov, B. M. A characterization of Hilbert space. (Russian) **80m:46021**
Nikol'skiĭ, N. K. *See* **Dovbyš, L. N.; et al., 80d:46041**
Peyser, Gideon The projection theorem for spaces of negative order. **80i:46018**
Prasad, Jagadish *See* **Kapoor, O. P., 80b:46028**
Precupanu, Teodor Characterizations of Hilbertian norms. (Italian summary) **80b:46036**
Pshov, S. V. Inequalities for the Kolmogorov and Bernšteĭn widths in Hilbert space. (Russian) **80b:46029**
Rakestraw, Roy M. A characterization of inner product spaces. **80i:46019**
Sudakov, V. N. *See* **Dovbyš, L. N.; et al., 80d:46041**
Szarek, Stanisław Jerzy On Kashin's almost Euclidean orthogonal decomposition of l_n^1. (Russian summary) **80i:46020**
Zachariou, Andreas Reversible orthogonalization. **80i:46021**

Secondary classifications:

Bridges, Douglas S. On weak operator compactness of the unit ball of $L(H)$. **(80d:03060)**
Grinblat, L. Š. Circles in the unit sphere of a Hilbert space. **(80d:52003)**
Krasnosel'skiĭ, M. A. The rotation of subspaces. (Russian) **(80a:47033)**

46C10 Other properties of such spaces

Secondary classifications:

Coppersmith, D. (*with* Lee, D. T.; Wong, C. K.) An elementary proof of nonexistence of isometries between l_p^k and l_q^k. **(80i:68030)**
Lee, D. T. *See* **Coppersmith, D.; et al., (80i:68030)**
Longstaff, W. E. A note on transforms of subspaces of Hilbert space. **(80i:47054)**
Sato, Hiroshi Hilbertian support of a probability measure on a Banach space. **(80j:60014)**
Wong, C. K. *See* **Coppersmith, D.; et al., (80i:68030)**

46C99 None of the above, but in this section

Pethe, P. V. (*with* Thakare, Nimbakrishna) Applications of Riesz representation theorem in semi-inner product spaces. **80d:46042**
Thakare, Nimbakrishna *See* **Pethe, P. V., 80d:46042**

Secondary classifications:

Antoine, Jean-Pierre Partial inner product spaces: another approach to unbounded operators. **(80c:47037)**
Bäni, Werner Subspaces of positive definite inner product spaces of countable dimension. **(80i:10024)**
Krall, Allan M. Laguerre polynomial expansions in indefinite inner product spaces. **(80m:33020)**
Lindquist, Anders (*with* Picci, Giorgio; Ruckebusch, Guy) On minimal splitting subspaces and Markovian representations. **(80e:60048)**
Picci, Giorgio *See* **Lindquist, Anders; et al., (80e:60048)**
Rozenský, Zdeněk Ein Beitrag zur Theorie der Orthogonalität auf Mengen. (Czech and Russian summaries) **(80i:04003)**
Ruckebusch, Guy *See* **Lindquist, Anders; et al., (80e:60048)**
Sarymsakov, B. T. A K-space of continuous selfadjoint endomorphisms in a Hilbert module over the semifield $\mathbf{R}^\Delta$. (Russian) **(80j:47051)**
Tapero, T. B. Metric invariants of a pair of planes in infinite-dimensional space. (Russian) **(80m:47034)**
Timan, A. F. *See* **Vestfrid, I. A., (80e:54039)**
Vestfrid, I. A. (*with* Timan, A. F.) A universality property of Hilbert spaces. (Russian) **(80e:54039)**
Wang, Chung Lie Gramian expansions and their applications. **(80e:15013)**
Youla, Dante C. Generalized image restoration by the method of alternating orthogonal projections. **(80c:94002)**

46D05 Spaces with indefinite inner product

Secondary classifications:

Chlou, Kuo Liang The geometry of indefinite J-spaces and stability behavior of linear systems. **(80b:34072)**
Sorjonen, Pekka On linear relations in an indefinite inner product space. **(80g:47043)**

46Exx Linear function spaces and their duals [See also 30H05; for function algebras, see 46J10.]

Cooper, James Bell ★Saks spaces and applications to functional analysis. **80b:46030**

46E05 Lattices of continuous, differentiable or analytic functions

Bauer, Heinz Funktionenkegel und Integralungleichungen. **80f:46023**
Cegrell, Urban On the space of delta-convex functions and its dual. **80b:46037**
Flösser, Hans-Otto (*with* Roth, Walter) Korovkinhüllen in Funktionenräumen. **80f:46024**
Fuchssteiner, Benno (*with* Neumann, Michael) Small boundaries. **80d:46043**
Neumann, Michael *See* **Fuchssteiner, Benno, 80d:46043**
Roth, Walter A stability theorem for the Choquet-ordering in $C_{\mathbf{C}}(X)$. **80g:46026**
See also **Flösser, Hans-Otto, 80f:46024**
Schroder, M. Order-bounded convergence structures on spaces of continuous functions. **80i:46022**

Secondary classifications:

Becker, Richard Some consequences of a kind of Hahn-Banach's theorem. **(80g:28013)**
Lotz, Heinrich P. (*with* Rosenthal, Haskell P.) Embeddings of $C(\Delta)$ and $L^1[0,1]$ in Banach lattices. **(80g:46023)**
Makarov, B. M. (*with* Weber, Martin) Einige Untersuchungen des Raumes der maximalen Ideale eines Vektorverbandes mit Hilfe finiter Elemente. I. Topologische Charakterisierung der finiten Elemente. **(80j:46016a)**
(*with* Weber, Martin) Einige Untersuchungen des Raumes der maximalen Ideale eines Vektorverbandes mit Hilfe finiter Elemente. II. Einige Eigenschaften des Raumes der (ml)-Ideale eines Vektorverbandes vom Typ (Σ). **(80j:46016b)**
Rosenthal, Haskell P. *See* **Lotz, Heinrich P., (80g:46023)**
Weber, Martin *See* **Makarov, B. M., (80j:46016a)** *and* **Makarov, B. M., (80j:46016b)**

46E10 Topological linear spaces of continuous, differentiable or analytic functions

Ansemil, J. M. Topological duality on the function space $\mathcal{H}(\mathbf{C}^N)$. **80d:46044**
Bachman, George (*with* Sultan, Alan) Representations of linear functionals on spaces of continuous functions, repletions, and general measure extensions. **80m:46022**
Bierstedt, Klaus-Dieter A question on inductive limits of weighted locally convex function spaces. **80k:46023**
Brace, J. W. (*with* Thomison, J. D.) Uniform filter convergence and pointwise filter convergence for function spaces. **80h:46031**
Dierolf, Peter L'espace $\mathcal{B}(\Omega)$ et les distributions sommables. (English summary) **80b:46038**
Hunter, Richard J. (*with* Lloyd, J. W.) Eberlein compacts and spaces of continuous functions. **80c:46032**
Jain, Daulat R. *See* **Jain, Pawan Kumar, 80d:46045**
Jain, Pawan Kumar (*with* Jain, Daulat R.) Certain classes of linear functionals on the space of entire functions over non-Archimedean fields. **80d:46045**
Jevtić, M. The space u^p, $0<p<1$, is not locally convex linear topological space. **80j:46040**
Kalinin, S. I. Sufficient sets for entire functions of exponential type. (Russian) **80g:46027**
Lloyd, J. W. *See* **Hunter, Richard J., 80c:46032**
Nachbin, Leopoldo Sur la densité des sous-algèbres polynomiales d'applications continûment différentiables. **80d:46046**
Nikol'skiĭ, N. K. An attempt to use the factor-operator for the localization of z-invariant subspaces. (Russian) **80e:46019**

Pikhtamov, G. A generalization of the Stone-Weierstrass theorem for weighted spaces. **80d:46047**
Sultan, Alan *See* **Bachman, George, 80m:46022**
Thomson, J. D. *See* **Brace, J. W., 80h:46031**
Żelazko, Wiesław Concerning algebras of functions with restricted growth. **80k:46024**

Secondary classifications:

Arosio, Alberto (*with* Mortola, S.) A characterization of compact sets in functional spaces. (Italian summary) **(80b:46001)**
Borole, Aruna On the algebra of entire functions over a non-Archimedean field taking values in a non-Archimedean Banach algebra. **(80k:46054)**
Briem, Eggert Enlarging a subspace of $C(X)$ without changing the Choquet boundary. **(80h:46069)**
Govaerts, W. Bornological spaces of non-Archimedean valued functions with the compact-open topology. **(80j:46115)**
Isidro, J. M. Topological duality on the functional space $(\mathcal{H}_b(U, F)\tau_b)$. **(80k:46048)**
Jain, Daulat R. (*with* Jain, Pawan Kumar) Proper bases and homeomorphisms in the space of entire functions of several variables over non-Archimedean fields. (Serbo-Croatian summary) **(80j:46116)**
Jain, Pawan Kumar *See* **Jain, Daulat R., (80j:46116)**
Juneja, Om Prakash (*with* Srivastava, P. D.) On the space of entire functions of (p, q) order ρ. **(80b:30020)**
Khurana, Surjit Singh Dunford-Pettis property. **(80b:46002)**
Métivier, Guy Propriété des itérés et ellipticité. **(80f:35047)**
Miyahara, Yasushi On relations between conformal mappings and isomorphisms of spaces of analytic functions on Riemann surfaces. **(80e:30005)**
Mortola, S. *See* **Arosio, Alberto, (80b:46001)**
Srivastava, P. D. On the space of certain class of analytic functions. **(80g:30032)**
See also **Juneja, Om Prakash, (80b:30020)**
Tilten, Michael Fortsetzungen von C^∞-Funktionen, welche auf einer abgeschlossenen Menge in $\mathbf{R}^n$ definiert sind. (English summary) **(80k:58016)**
Zafarani, Jafar The strict topology and topological measure theory for completely regular spaces. **(80d:28019)**

46E15 Banach spaces of continuous, differentiable or analytic functions

Alspach, Dale E. Quotients of $C[0, 1]$ with separable dual. **80b:46039**
Andrew, Alfred D. On subsequences of the Haar system in $C(\Delta)$. **80d:46048**
Cambern, Michael A Holsztyński theorem for spaces of continuous vector-valued functions. **80d:46049**
Cima, Joseph A. (*with* Roberts, James) Denting points in B^p. **80c:46033**
Ellis, Alan J. ★Topics in Banach spaces of continuous functions. **80h:46032**
Georgijević, Dušan Décompositions de l'espace H^p par des sous-espaces de type spécial. (English summary) **80f:46025**
Johnson, Jerry A. A note on the predual of $\mathrm{Lip}(S, d)$. **80j:46041**
Kisljakov, S. V. Reflexive subspaces of the space C_*^*. (Russian) **80h:46033**
Konovalov, V. M. On the problem of widths of classes of analytic functions. (Russian) **80a:46015**
Matsuda, Minoru On general denting points and the unique positive extension of certain positive linear functionals. **80c:46034**
Mayer, Jacques Isometries in Banach spaces of functions, holomorphic in the unit disc and smooth up to its boundary. (Russian. English summary) **80f:46023**
Pol, Roman A function space $C(X)$ which is weakly Lindelöf but not weakly compactly generated. **80j:46042**
Roberts, James *See* **Cima, Joseph A., 80c:46033**
Rubinov, A. M. A generalization of Choquet's ordering. (Russian. English summary) **80i:46024**
Ryll, Jerzy Interpolating bases for spaces of differentiable functions. **80c:46035**
Selov'ev, A. A. Estimates in L^p of the integral operators that are connected with spaces of analytic and harmonic functions. (Russian) **80k:46025**
Wronicz, Z. Construction of an orthonormal basis in the space of functions analytic in a disc and of class C^n in its closure. **80k:46026**
Zanjatin, V. N. The Čebyšev center in hypersubspaces of continuous functions. (Russian) **80m:46023**

Secondary classifications:

Amir, Dan (*with* Ziegler, Zvi) Expansions of generalized completely convex functions. **(80f:26009)**
Ando, Tsuyoshi On the predual of H^∞. **(80c:46063)**
Armstrong, Thomas E. Gleason spaces and topological dynamics. **(80h:54049)**
Basilower, H. Isomorphisms and simultaneous extensions in $C(S)$. **(80h:54015)**
Batty, C. J. K. Tensor products of compact convex sets and Banach algebras. **(80c:46060)**
Cambern, Michael Reflexive spaces with the Banach-Stone property. **(80a:46014)**
Chang, Sun Yung A. Structure of some subalgebra of L^∞ of the torus. **(80k:32005)**
Cima, Joseph A. The basic properties of Bloch functions. **(80k:30037)**
Folland, G. B. (*with* Hung, H. T.) Nonisotropic Lipschitz spaces. **(80k:58088)**
Garnett, John B. (*with* Latter, Robert H.) The atomic decomposition for Hardy spaces in several complex variables. **(80j:32011)**
Govaerts, W. Bornological spaces of non-Archimedean valued functions with the point-open topology. **(80g:46063)**
Haydon, Richard On dual L^1-spaces and injective bidual Banach spaces. **(80e:46013)**
Heinz, Harald On a theorem of Cambern. **(80e:46010)**
Hung, H. T. *See* **Folland, G. B., (80k:58088)**
Jain, Daulat R. *See* **Saxena, R. K., (80f:32009)**
Latter, Robert H. The atomic decomposition of Hardy spaces. **(80j:30046)**
See also **Garnett, John B., (80j:32011)**
Maurey, Bernard Isomorphismes entre espaces H_1. (English summary) **(80d:60067)**
Nakai, Mitsuru (*with* Sario, Leo) Banach spaces of harmonic functions in L_p. **(80k:30040)**
Prolla, João B. Non-Archimedean function spaces. **(80d:46128)**
Reich, Edgar Uniqueness of Hahn-Banach extensions from certain spaces of analytic functions. **(80j:30074)**
Rubel, Lee A. (*with* Timoney, Richard M.) An extremal property of the Bloch space. **(80h:30034)**
Sario, Leo *See* **Nakai, Mitsuru, (80k:30040)**
Saxena, R. K. (*with* Jain, Daulat R.) On the space of entire functions of finite growth over non-Archimedean fields. I, II. **(80f:32009)**
Timoney, Richard M. *See* **Rubel, Lee A., (80h:30034)**
Weiss, Guido Some problems in the theory of Hardy spaces. **(80j:30051)**
Wojtaszczyk, P. Decompositions of H_p spaces. **(80k:46061)**
Ziegler, Zvi *See* **Amir, Dan, (80f:26009)**

46E20 Hilbert spaces of continuous, differentiable or analytic functions

Georgijević, Dušan Derivative and integral as linear functionals in a Hilbert space with a reproducing kernel. (Serbo-Croatian. German summary) **80j:46043**
Hastings, William W. A construction of Hilbert spaces of analytic functions. **80f:46026**

Secondary classifications:

Ball, Joseph A. Factorization and model theory for contraction operators with unitary part. **(80d:47013)**
Jakobsen, Hans Plesner Tensor products, reproducing kernels, and power series. **(80f:22010)**
Meidan, Reuven Reproducing-kernel Hilbert spaces of distributions and generalized stochastic processes. **(80e:60053)**

46E25 Rings and algebras of continuous, differentiable or analytic functions {For Banach function algebras, see 46J10, 46J15.}

Secondary classifications:

Bauer, Heinz (*with* Leha, Gottlieb; Papadopoulou, Susanne) Determination of Korovkin closures. **(80k:46019)**
Cima, Joseph A. (*with* Schober, G.) On spaces of meromorphic functions. **(80d:30021)**
Habre, William *See* **Noureddine, Khalil, (80e:54015)**
Leha, Gottlieb *See* **Bauer, Heinz; et al., (80k:46019)**
Noureddine, Khalil (*with* Habre, William) Topologies P-strictes. (English summary) **(80e:54015)**
Papadopoulou, Susanne *See* **Bauer, Heinz; et al., (80k:46019)**
Petzeltová, Hana (*with* Vrbová, Pavla) Factorization in the algebra of rapidly decreasing functions on $\mathbf{R}^n$. **(80f:46056)**
Schober, G. *See* **Cima, Joseph A., (80d:30021)**
Vrbová, Pavla *See* **Petzeltová, Hana, (80f:46056)**

46E27 Spaces of measures [See also 28A33.]

Adamski, Wolfgang An abstract approach to weak topologies in spaces of measures. **80c:46036**
Hegde, Shankar Some smoothness properties of measures on topological spaces. **80h:46034**
Jeschek, Franz *See* **Poppe, Harry, 80i:46025**
Metzler, Richard C. Uniqueness of extensions of positive linear functions. **80f:46027**
Poppe, Harry (*with* Jeschek, Franz) Remarks on compactness in spaces of measures. **80i:46025**
Talagrand, Michel Utilisation de l'hypothèse du continu pour la construction d'espaces compacts. (English summary) **80h:46035**

Secondary classifications:

Alò, Richard A. (*with* de Korvin, André) Application of bases to the study of measures and operators on measure spaces. **(80a:47044)**
Jiménez Guerra, Pedro Compactness in the space of Radon measures of type $(\mathfrak{K})$. **(80i:28016)**
de Korvin, André *See* **Alò, Richard A., (80a:47044)**
Pachl, Jan K. Measures as functionals on uniformly continuous functions. **(80j:28012)**
Saito, Masahiko On the non-standard representation of linear mappings from a function space. **(80a:03091)**

46E30 Spaces of measurable functions (L^p-spaces, Orlicz spaces, Köthe function spaces, Lorentz spaces, rearrangement invariant spaces, etc.)

Andrew, Alfred D. A remark on generalized Haar systems in L_p, $1<p<\infty$. **80k:46027**
Bennett, Colin (*with* Sharpley, Robert C.) Weak-type inequalities for H^p and BMO. **80j:46044**
Berkolaiko, M. Z. (*with* Rutickiĭ, Ja. B.) A class of function spaces. (Russian) **80k:46028**
Butzer, P. L. (*with* Fehér, Franziska) Generalized Hardy and Hardy-Littlewood inequalities in rearrangement-invariant spaces. **80c:46037**
Cambern, Michael On L^1 isomorphisms. **80j:46045**
Chiti, Giuseppe Rearrangements of functions and convergence in Orlicz spaces. **80c:46020**
Clauzure, P. Exemple d'espace d'Orlicz qui n'est pas un espace de Köthe. **80c:46038**
Day, Peter W. The weak closure of the equimeasurable rearrangements of a measurable function. **80k:46029**
Denker, Manfred (*with* Kombrink, Rainer) On B-convex Orlicz spaces. **80k:46030**
Din' Zung (*with* Magaril-Il'jaev, G. G.) Bernstein- and Favard-type problems and the mean E-dimension of some classes of functions. (Russian) **80m:46024**
Dmitriev, V. I. (*with* Krein, S. G.) Interpolation of operators of weak type. (Russian summary) **80k:46036**

Fehér, Franziska The K- and J-interpolation methods for rearrangement-invariant Banach spaces and their duality. **80g:46028**
See also **Butzer, P. L., 80c:46037**

Frydrych, Zdzisław On the Orlicz space and Dirichlet problem for m-dimensional sphere. **80h:46050**

Ganzburg, M. I. Some inequalities for polynomials and entire functions of finite degree in symmetric spaces. (Russian) **80e:46021**

Garnett, John B. (*with* Jones, Peter W.) The distance in BMO to L^∞. **80h:46037**

Gluer, Emmanuel Topologies de dualité sur les espaces intégraux de type Orlicz. Applications à l'optimisation. (English summary) **80b:46040**

Grigorjan, M. D. Approximation by rational fractions in Orlicz spaces without the Δ_2-condition. (Russian. Armenian summary) **80i:46026**

Gusjatnikova, V. N. On the completeness of the system $\{X^n\}_0^\infty$ in weight spaces $L_{p,\alpha}(-\infty, \infty)$ and $L_{p,\alpha,\infty}(-\infty, \infty)$. (Russian) **80e:46022**

Hedberg, Lars Inge Approximation in L^p by analytic and harmonic functions. **80j:46046**

Heinig, Hans P. (*with* Vaughan, David) Interpolation on Orlicz spaces involving weights. **80f:46028b**
The Marcinkiewicz interpolation theorem extends to weighted spaces. **80f:46028a**

Jones, Peter W. *See* **Garnett, John B., 80h:46037**

Jurkat, W. B. (*with* Troutman, J. L.) Maximal inequalities related to generalized a.e. continuity. **80h:46038**

Kalton, Nigel (*with* Peck, N. T.) Quotients of $L_p(0, 1)$ for $0 \leqslant p < 1$. **80d:46051**

Kombrink, Rainer *See* **Denker, Manfred, 80k:46030**

Korobeĭnik, Ju. F. On the question of the property of being a basis of a system of exponents on the halfaxis. (Russian) **80b:46041**

Krein, S. G. *See* **Dmitriev, V. I., 80h:46036**

Landers, Dieter (*with* Rogge, Lothar) On projections and monotony in L_p-spaces. **80b:46042**
(*with* Rogge, Lothar) A functional relationship between the different r-means for indicator functions. **80d:46052**

Lewis, D. R. Finite dimensional subspaces of L_p. **80b:46043**

Macías, Roberto A. (*with* Segovia, Carlos) On the decomposition into atoms of distribution on Lipschitz spaces. **80d:46053**

Magaril-Il'jaev, G. G. *See* **Din' Zung, 80m:46024**

Maligranda, Lech A remark on the Riesz and Calderón-Zygmund theorem. **80k:46031**

Maurey, Bernard (*with* Schechtman, G.) Some remarks on symmetric basic sequences in L_1. **80c:46039**

Nelson, Robert R. The spaces of functions of finite upper p-variation. **80f:46027**

Pavlov, E. A. The operator of Calderón. (Russian. English summary) **80d:46054**

Peck, N. T. *See* **Kalton, Nigel, 80d:46051**

Peetre, Jaak Two observations on a theorem by Coifman. **80j:46047**

Riečan, Beloslav A note on Lebesgue spaces. **80f:46028**

Rodin, V. A. (*with* Semenov, E. M.) The complementability of a subspace that is generated by the Rademacher system in a symmetric space. (Russian) **80j:46048**

Rogge, Lothar *See* **Landers, Dieter, 80b:46042** *and* **Landers, Dieter, 80d:46052**

Rutickiĭ, Ja. B. *See* **Berkolaiko, M. Z., 80k:46028**

Schechtman, G. *See* **Maurey, Bernard, 80c:46039**

Segovia, Carlos *See* **Macías, Roberto A., 80d:46053**

Semenov, E. M. Equivalence in $\mathcal{C}_\gamma$ of permutations of the Haar system. (Russian) **80m:46025**
See also **Rodin, V. A., 80j:46048**

Sharpley, Robert C. *See* **Bennett, Colin, 80j:46044**

Sparr, Gunnar Interpolation of weighted L_p-spaces. **80d:46055**

Tokarev, E. V. Quotient spaces of Marcinkiewicz spaces. (Russian) **80c:46040**
Subspaces of symmetric function spaces. (Russian) **80j:46049**

Torchinsky, Alberto The K-functional for rearrangement invariant spaces. **80k:46032**

de la Torre, Alberto Ergodic H^1 spaces. **80f:46029**

Triebel, Hans Remarks on Lebesgue-Besov spaces (representations, multipliers, embeddings). **80e:46023**

Troutman, J. L. *See* **Jurkat, W. B., 80h:46038**

Turpin, Philippe Fubini inequalities and bounded multiplier property in generalized modular spaces. **80b:46044**

Vandème, Renée Stabilité géométrique et régularisation dans les espaces intégraux de type Orlicz à paramètre et à variable vectorielle; critère de compacité de Kolmogorov-Riesz. (English summary) **80c:46041**

Vaughan, David *See* **Heinig, Hans P., 80f:46028b**

Secondary classifications:

Bočorišvili, M. A. Functions satisfying the generalized Lipschitz and Zygmund conditions in an Orlicz space. (Russian) **(80e:42004)**
A boundary property of the Poisson integral. (Russian. Georgian and English summaries) **(80j:41036)**

Bukvalov, A. V. Additions to the article: "The duality of functors that are generated by spaces of vector-valued functions" (Izv. Akad. Nauk SSSR Ser. Mat. **39** (1975), no. 6, 1284–1309). (Russian) **(80c:46071)**
Continuity of operators in the spaces of measurable vector-valued functions with applications to the investigation of Sobolev spaces and analytic functions in the vector-valued case. (Russian) **(80m:47025)**

Bund, Iracema M. Closed invariant subspaces of a Birnbaum-Orlicz space. **(80h:43001)**

Capon, Michèle Primarité de $L^p(l_r)$, où $1 < p, r < \infty$. (English summary) **(80f:46011)**

Fehér, Franziska A note on a paper of E. R. Love: "Some inequalities for fractional integrals" (*Linear spaces and approximation* (Proc. Conf., Math. Res. Inst., Oberwolfach, 1977), pp. 177–184, Birkhäuser, Basel, 1978). **(80c:47041)**

Fischer, Werner (*with* Schöler, Ulrich) Integral representation of additive operators with respect to a vector measure and its applications. **(80h:47038)**

Gapaillard, Christiane (*with* Merucci, Claude) Espaces fonctionnels de Banach—méthode discrète d'interpolation. **(80g:46060)**

Godziewski, Andrzej Interpolation of modular spaces. I. **(80i:46058)**

Gustavsson, Jan A function parameter in connection with interpolation of Banach spaces. **(80d:46124)**

an der Heiden, Uwe On the representation of linear functionals by finitely additive set functions. **(80f:28004)**

Hidirov, Ju. È. Approximation of functions of Orlicz-Sobolev spaces by smooth functions. (Russian) **(80m:46029)**

de Jonge, Ep Conditional expectation and ordering. **(80e:60003)**

(Love, E. R.) *See* **Fehér, Franziska, (80c:47041)**

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46E35 Sobolev spaces and other spaces of "smooth" functions, imbedding theorems, trace theorems

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46E40 Spaces of vector- and operator-valued functions

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Shultz, Harris S. A new algebra of distributions on $\mathbf{R}^n$. **80d:46071**

Sloan, Alan A note on exponentials of distributions. **80m:46035**

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Vuvunikjan, Ju. M. (*with* Karakozov, S. D.) The V-principle and Paley-Wiener theorems for vector-valued generalized functions. (Russian) **80j:46069**

Yger, Alain Fonctions définies dans le plan et moyennes en tout point de leurs valeurs aux sommets de deux carrés. (English summary) **80c:46049**

Une généralisation d'un théorème de J. Delsarte. (English summary) **80d:46073**

Secondary classifications:

Berner, Paul D. Convolution operators and surjective limits. **(80k:46002)**

(Bulgaru, O. E.) *See* **Kecs, W.; et al., (80d:00032)**

Chi, Dong Pyo (*with* Cho, Tae Geun; Kim, Jongsik) Surjectivity of the transposed map. **(80k:46006)**

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Kamen, Edward W. An operator theory of linear functional differential equations. **(80a:34091)**

Kecs, W. (*with* Teodorescu, Petre P.) ★Введение в теорию обобщенных функций с приложениями в технике. (Russian) [Introduction to the theory of generalized functions with application to technology] **(80d:00032)**

Kim, Jongsik *See* **Chi, Dong Pyo; et al., (80k:46006)**

Kurlandzki, Jerzy Canonical formalism in distribution spaces. II. (Russian summary) **(80k:70025)**

Lehmann, J. Über Distributionen auf Vektorbündeln. I. **(80g:58017a)**

Über Distributionen auf Vektorbündeln. II. **(80g:58017b)**

Liu, Kuang Chi On the inversion of the Weyl transform. **(80d:47053)**

Napalkov, V. V. Convolution equations in multidimensional spaces. (Russian) **(80m:32003)**

Orton, Marion Distributions and singular integral equations of Carleman type. **(80k:45007)**

Pandey, J. N. (*with* Pathak, Ram Shankar) Eigenfunction expansion of generalized functions. **(80d:34029)**

Pathak, Ram Shankar *See* **Pandey, J. N., (80d:34029)**

(Pobedrja, B. E.) *See* **Kecs, W.; et al., (80d:00032)**

Sebbar, Ahmed Prolongement des solutions d'un opérateur différentiel d'ordre infini. (English summary) **(80k:32003)**

Ševčik, V. V. Integral equations of convolution type in a family of spaces of generalized functions that is continuously dependent on a parameter. (Russian) **(80b:45007)**

Tasche, Manfred Funktionalanalytische Methoden in der Operatorenrechnung. **(80c:47001)**

Teodorescu, Petre P. *See* **Kecs, W., (80d:00032)**

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Le problème de Cauchy hyperbolique dans les classes d'ultrafonctions et d'ultradistributions. **(80e:35040)**

Vasilache, Sergiu Algebraic method for solving linear partial differential equations with variable coefficients. I. Basic theory. **(80d:35031)**

Zhitev, I. S. Some estimates of quantum mechanical quasidistributions. (Russian) **(80a:81049)**

Zorfi, L. M. On the application of generalized functions in analytic methods of investigation of complex elastic systems. (Russian. English summary) **(80c:73022)**

46F12 Integral transforms in distribution spaces [See also 42–XX, 44–XX.]

Gottlieb, J. (*with* Jucan, T.; Vescan, R. T.) A generalization of the Fourier transform. (Romanian summary) **80h:46057**

Jucan, T. *See* **Gottlieb, J.; et al., 80h:46057**

Pandey, J. N. *See* **Pathak, Ram Shankar, 80m:46037**

Pathak, Ram Shankar On the Meijer transform of generalized functions. **80m:46036**

(*with* Pandey, J. N.) The G-transform of generalized functions. **80m:46037**

Rao, G. L. N. The n-dimensional generalized Stieltjes transformation of distributions. **80g:46038**

Vescan, R. T. *See* **Gottlieb, J.; et al., 80h:46057**

Zhar'ev, Ju. M. Nonunitary representations of $MH(2)$, the $ax+b$ group and the Laplace transform. (Russian. English summary) **80g:46039**

46F15 Hyperfunctions, analytic functionals [See also 32A25, 32A45, 32C35, 58G07.]

(de Jager, Eduard M.) *See* **de Roever, J. W., 80h:46058**

Morimoto, Mitsuo Analytic functionals with non-compact carrier. **80d:46074**

de Roever, J. W. ★Complex Fourier transformation and analytic functionals with unbounded carriers. **80h:46058**

Žarinov, V. V. Lattice of subspaces of Fourier ultrahyperfunctions. (Russian) **80h:46059**

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Bony, Jean-Michel Hyperfonctions et équations aux dérivées partielles (d'après M. Sato, T. Kawai et M. Kashiwara). **(80i:58035)**

Chou, Chin Ch'êng (*with* Marti, Jean-André) Un théorème d'unicité sur les hyperfonctions régulières par rapport à une des variables. (English summary) **(80i:32024)**

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Marti, Jean-André *See* **Chou, Chin Ch'êng, (80i:32024)**

Pathak, Ram Shankar Analytic functions having distributional boundary values in W'-spaces. **(80i:32021)**

Ramis, Jean-Pierre Géométrie analytique et géométrie algébrique (variations sur le thème "GAGA"). **(80g:32014)**

Yoshino, Kunio Analytic continuation of arithmetic holomorphic functions on a half-plane. **(80h:30005)**

46F20 Distributions as boundary values of analytic functions [See also 30Exx, 32A40.]

Langenbruch, Michael Randverteilungen von Nullösungen hypoelliptischer Differentialgleichungen. (English summary) **80d:46075**

Secondary classifications:

Keller, Klaus Analytic regularizations, finite part prescriptions and products of distributions. **(80k:46044)**

Nishiwada, Kinimasa On local characterization of wave front sets in terms of boundary values of holomorphic functions. **(80i:32023)**

Ross, Guy Formules intégrales pour les formes différentielles sur $\mathbf{C}^n$. II. **(80h:32008)**

Watanabe, Toshihiro On the spectral representation of holomorphic functions on some domain. **(80k:32002)**

46F25 Distributions on infinite-dimensional spaces [See also 58C35.]

Abuabara, Teófilo A version of the Paley-Wiener-Schwartz theorem in infinite dimensions. **80g:46040a**

The Paley-Wiener-Schwartz theorem in infinite dimensions. (Portuguese) **80g:46040b**

Kondrat'ev, Ju. G. (*with* Samoĭlenko, Ju. S.) The spaces of trial and generalized functions of infinite number of variables. **80h:46060**

Samoĭlenko, Ju. S. *See* **Kondrat'ev, Ju. G., 80h:46060**

Secondary classifications:

Abuabara, Teófilo On the Paley-Wiener-Schwartz theorem in infinite dimensions. (Italian summary) **(80c:46050)**

A remark on infinitely nuclearly differentiable functions. **(80m:26016)**

Kree, Paul Calcul d'intégrales et de dérivées en dimension infinie. **(80k:46051)**

46F99 None of the above, but in this section

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Albrecht, Ernst (*with* Neumann, Michael) Über die Stetigkeit von dissipativen linearen Operatoren. **(80f:47030)**

Carmichael, Richard D. Strong boundedness of analytic functions in tubes. **(80j:32002)**

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Lomadze, Ju. M. (*with* Sabad, O. P.) Nonlocal quantum field theory in the Bogoljubov axiomatic approach. I. Necessary classes of generalized functions. (Russian. English summary) **(80a:81065a)**

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Neumann, Michael *See* **Albrecht, Ernst, (80f:47030)**

Sabad, O. P. *See* **Lomadze, Ju. M., (80a:81065a)** *and* **Lomadze, Ju. M., (80a:81065b)**

Vasilescu, Florian-Horia The extension of a spectral distribution. **(80g:47041)**

Zhitev, I. S. Phase-space quasi-distributions in quantum mechanics. II. (Russian summary) **(80b:81059)**

46Gxx Measures, integration, derivative {For integration on infinite-dimensional spaces, see 28C20; for nonlinear functional analysis, see 58–XX, especially 58Cxx.}

Secondary classifications:

Cit'lanaże, E. ★Mat'ematikuri analizis sap'uźvlegi p'unk'c'ionalur sivrc'eebi. (Georgian) [Principles of mathematical analysis in functional spaces] **(80g:46001)**

46G05 Derivatives

Brézis, Haïm (*with* Fraenkel, L. E.) A function with prescribed initial derivatives in different Banach spaces. **80h:46047**

Castaing, Charles Compacité faible, décomposabilité dans L^1_X et dans certains espaces du type Köthe-Orlicz. (English summary) **80m:46038**

Fraenkel, L. E. *See* **Brézis, Haïm, 80h:46047**

Hyers, D. H. A note on Fréchet's definition of "polynômes abstraits". **80h:46050**

Ioffe, Alexandre D. Différentielles généralisées d'applications localement lipschitziennes d'un espace de Banach dans un autre. (English summary) **80m:46039**

Kutateladze, S. S. Extreme points of subdifferentials. (Russian) **80a:46021**

Phelps, R. R. Gaussian null sets and differentiability of Lipschitz map on Banach spaces. **80m:46040**

Radyno, Ja. V. Linear differential equations in locally convex spaces. III. Examples of regular operators. (Russian) **80h:46062**

Rockafellar, R. Tyrrell Directionally Lipschitzian functions and subdifferential calculus. **80j:46070**

Talagrand, Michel Deux exemples de fonctions convexes. (English summary) **80d:46076**

Zajíček, Luděk On the differentiation of convex functions in finite and infinite dimensional spaces. **80h:46063**

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Bouchitte, Guy Maximale monotonie et pseudomonotonie renforcées de l'opérateur de Nemickiĭ associé au sous-différentiel d'un intégrande convexe normal. **(80b:47067)**

Čekanov, Ju. N. *See* **Vladimirov, A. A.; et al., (80m:49006)**

Fabián, Marian Concerning a geometrical characterization of Fréchet differentiability. (Czech and Russian summaries) **(80d:58007)**

Giacalone, Angela (*with* Gori Cocchieri, Candida) The differentiability of mappings with values in Banach spaces. (Italian) **(80a:26007)**

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Graff, Richard A. Elements of nonlinear functional analysis. **(80j:58019)**

Harnos, Zs. On the geometric characterization of differentiation in normed vector spaces. **(80j:58006)**

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Lambert, André Quelques théorèmes de décomposition des ultradistributions. (English summary) **(80m:46033)**

Larman, D. G. (*with* Phelps, R. R.) Gâteaux differentiability of convex functions on Banach spaces. **(80m:46017)**

Lebourg, Gérard Sous-dérivabilité de fonctions semi-continues et convergence de dérivées: quelques résultats en densité. (English summary) **(80d:49004)**

Nesterov, Ju. E. *See* **Vladimirov, A. A.; et al., (80m:49006)**

Ombach, Jerzy Continuous dependence in the implicit function theorem. **(80h:58013)**

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Seip, Ulrich A convenient setting for differential calculus. **(80b:58013)**

Thibault, Lionel Sous-différentiels de fonctions vectorielles compactement lipschitziennes. (English summary) **(80b:58014)**

Subdifferentiability of compactly Lipschitzian mappings. **(80i:49019)**

Vladimirov, A. A. (*with* Nesterov, Ju. E.; Čekanov, Ju. N.) Uniformly convex functionals. (Russian) **(80m:49006)**

46G10 Vector-valued measures and integration [See also 28Bxx, 46B22.]

Aliò, Richard A. (*with* de Korvin, André) Some approximation theorems for vector measures. **80g:46041**

Chatterji, S. D. The Radon-Nikodým property. **80h:46064**

Costé, A. (*with* Pallu de la Barrière, R.) On set-valued measures with convex closed values and their set of selections. **80m:46041**

Diestel, Joe Some problems arising in connection with the theory of vector measures. **80d:46077**

Egghe, L. On the Radon-Nikodým property, and related topics in locally convex spaces. **80d:46078**

Jajte, Ryszard Orthogonally scattered Gleason measures. (Russian summary) **80m:46042**

Kehlet, Eaben T. Disintegration theory on a constant field of nonseparable Hilbert spaces. **80m:46043**

Khurana, Surjit Singh Pointwise compactness and measurability. **80m:46044**

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Linde, Werner Operator ideals and vector measures. **80j:46071**

Musiał, Kazimierz The weak Radon-Nikodým property in Banach spaces. **80b:46065**

Nagano, Yoshihiko *See* **Ohba, Sachio, 80d:46079**

Niculescu, Constantin P. Lebesgue-Radon-Nikodým type theorems for operators defined on ordered Banach spaces. **80b:46051**

Nougaïo-Sainte-Beuve, Marie-France Quelques propriétés de mesures vectorielles et applications. (English summary) **80b:46052**

Ohba, Sachio (*with* Nagano, Yoshihiko) Locally convex spaces with the property (Σ). **80d:46079**

Pallu de la Barrière, R. *See* **Costé, A., 80m:46041**

Turpin, Philippe Properties of Orlicz-Pettis or Nikodým type and barrelledness conditions. (French summary) **80d:46080**

Secondary classifications:

Birman, M. Š. (*with* Verlik, A. M.; Solomjak, M. Z.) The product of commuting spectral measures may fail to be countably additive. (Russian) **(80h:28010)**

Christensen, Mark J. Extension theorems for operator-valued measures. **(80e:28011)**

Costé, A. (*with* Pallu de la Barrière, R.) Radon-Nikodým theorems for set-valued measures whose values are convex and closed. **(80h:28015)**

Fremlin, David H. (*with* Talagrand, Michel) A decomposition theorem for additive set-functions, with applications to Pettis integrals and ergodic means. **(80k:28004)**

Ghoussoub, Nassif Orderamarts: a class of asymptotic martingales. **(80i:60075)**

Summability and vector amarts. **(80i:60076)**

Graves, William H. (*with* Sentilles, F. Dennis) The extension and completion of the universal measure and the dual of the space of measures. **(80j:28014)**

Hackenbroch, Wolfgang On the Radon-Nikodým theorem for operator measures and its applications to prediction and linear systems theory. **(80f:28008)**

Kalton, Nigel (*with* Turett, Barry; Uhl, J. J., Jr.) Basically scattered vector measures. **(80k:28013)**

Khurana, Surjit Singh Strong measurability in Fréchet spaces. **(80j:28015)**

Labuda, Iwo On integration and Suslin spaces. **(80h:28011)**

Le Van Tu The range of multimeasure. **(80b:28008)**

Martikainen, Olli Convolutions of noncommutative analogues of vector measures with applications to operator ideals. **(80h:46111)**

Ohba, Sachio Vector measure theory. (Japanese) **(80h:28012)**

Pallu de la Barrière, R. *See* **Costé, A., (80h:28015)**

Saženkov, A. N. Boundedness of vector-valued outer measures. (Russian) **(80i:28026)**

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Shuchat, Alan Spectral measures and homomorphisms. **(80a:47053)**

Solomjak, M. Z. *See* **Birman, M. Š.; et al., (80h:28010)**

Story, Donald P. A Fubini theorem for inductive tensor product measures. **(80e:28014)**

Swartz, Charles A generalized Orlicz-Pettis theorem and applications. **(80m:28011)**

Talagrand, Michel *See* **Fremlin, David H., (80k:28004)**

Turett, Barry *See* **Kalton, Nigel; et al., (80k:28013)**

Turpin, Philippe Boundedness problems for finitely additive measures. **(80a:28005)**

Uhl, J. J., Jr. *See* **Kalton, Nigel; et al., (80k:28013)**

Verlik, A. M. *See* **Birman, M. Š.; et al., (80h:28010)**

46G12 Measures and integration on abstract linear spaces [See also 28Cxx.]

46G15 Lifting theory [See also 28A51.]

Monakov-Rogozkin, A. The structure of spaces of measurable functions that admit lifting. (Russian. Estonian and English summaries) **80i:46037**

Talagrand, Michel Solution d'une question de H. Weizsächer. **80d:46081**

von Weizsäcker, Heinrich Strong measurability, liftings and the Choquet-Edgar theorem. **80f:46046**

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Cohn, Donald L. Liftings and the construction of stochastic processes. **(80b:60052)**

Johnson, Russell A. Existence of a strong lifting commuting with a compact group of transformations. II. **(80m:28008)**

Losert, Viktor A measure space without the strong lifting property. **(80f:28006)**

Maher, Richard J. Strong liftings on topological measured spaces. **(80c:28006)**

46G20 Infinite-dimensional holomorphy [See also 32–XX, 58B12, 58C10.]

Aragona, Jorge Holomorphically significant properties of spaces of holomorphic germs. **80h:46066**

Aron, Richard M. (*with* Berner, Paul D.) A Hahn-Banach extension theorem for analytic mappings. (French summary) **80e:46029**

Berner, Paul D. *See* **Aron, Richard M., 80e:46029**

(Clancey, Kevin F.) *See* **Šubin, M. A., 80m:46045**

Colombeau, Jean-François (*with* Meise, Reinhold) Strong nuclearity in spaces of holomorphic mappings. **80j:46072**

Dineen, Seán Fonctionnelles analytiques et formes sur des espaces nucléaires. (English summary) **80d:46082**

Isidro, J. M. Topological duality on the functional space $(\mathcal{H}_b(U, F)_{\tau_b})$. **80k:46048**

(Kaballo, Winfried) *See* **Šubin, M. A., 80m:46045**

(Leiong, Pierre) *See* **Nguyen Thanh Van, 80b:46053**

de Matos, Mário Carvalho The uniform compact-ported topology on spaces of holomorphic mappings. (Portuguese) **80g:46042**

On separately holomorphic and Silva holomorphic mappings. **80j:46073**

Meise, Reinhold *See* **Colombeau, Jean-François, 80j:46072**

Mujica, Jorge Complex homomorphisms of the algebras of holomorphic functions on Fréchet spaces. **80j:46074**

Nguyen Thanh Van Sur le lemme de Hartogs dans les espaces vectoriels topologiques de Baire. (English summary) **80b:46053**

Noverraz, Philippe Topologies associated with Nachbin topology. **80h:46067**

Paques, Otília T. Wiermann Tensor products of Silva-holomorphic functions. **80g:46040**

Soraggi, Roberto L. Bounded sets in spaces of holomorphic germs. **80i:46038**

Sparing, H.-D. Analytische Operatoren vektorieller Veränderlicher in komplexen und reellen Banach-Räumen. I. **80d:46083**

Šubin, M. A. On holomorphic families of subspaces of a Banach space. **80m:46045**

Tagirov, T. S. Properties of various kinds of analyticity for certain classes of complex infinite-dimensional spaces. (Russian) **80d:46084**

(Thijsse, G. Philip A.) *See* **Šubin, M. A., 80m:46045**

Secondary classifications:

Abuabara, Teófilo A version of the Paley-Wiener-Schwartz theorem in infinite dimensions. **(80g:46040a)**

Ansemil, J. M. Topological duality on the function space $\mathcal{H}(\mathbf{C}^N)$. **(80d:46044)**

Börgens, Manfred (*with* Meise, Reinhold; Vogt, Dietmar) Fonctions holomorphes sur certains espaces échelonnés et λ-nucléarité. (English summary) **(80m:46008)**

Globevnik, J. Boundaries for polydisc algebras in infinite dimensions. **(80i:46046)**

Gorban', A. N. Sets of removable singularities and continuous mappings. (Russian) **(80d:32010)**

Harris, Lawrence A. Schwarz-Pick systems of pseudometrics for domains in normed linear spaces. **(80j:32043)**

Kiselman, Christer O. Sur la convexité linéelle. **(80j:32036)**

Plurisubharmonic functions and plurisubharmonic topologies. **(80k:31005)**

Krée, Paul Méthodes fonctorielles en analyse de dimension infinie et holomorphie anticommutative. **(80m:81045)**

Leiong, Pierre Application des propriétés des fonctions plurisousharmoniques à un problème de mesure dans les espaces vectoriels complexes. **(80g:32033)**

Ensembles de contrôle de croissance pour l'analyse complexe dans les espaces de Fréchet. (English summary) **(80b:32019)**

Meise, Reinhold *See* **Börgens, Manfred; et al., (80m:46008)**

Moraes, Luiza Amália Holomorphy types and Runge domains. I. (Portuguese) **(80m:32022a)**

Holomorphy types and Runge domains. II. (Portuguese. English summary) **(80m:32022b)**

Mujica, Jorge Ideals of holomorphic functions on Fréchet spaces. **(80i:32026)**

Noverraz, Philippe Notions de domaine d'holomorphie dans les espaces de Banach complexes. **(80g:32009)**

Raboin, Pierre Le problème du $\bar{\partial}$ sur un espace de Hilbert. **(80g:32035)**

Application de la théorie de la mesure en dimension infinie à la résolution de l'équation $\bar{\partial}$ sur un espace de Hilbert. **(80g:32034)**

The $\bar{\partial}$ equation on a Hilbert space and some applications to complex analysis on infinite dimensional vector spaces. **(80g:32036)**

Vesentini, Edoardo Variations on a theme of Carathéodory. **(80k:32029)**

Methods of differential geometry in functional analysis. (Italian. English summary) **(80g:32044)**

Vigué, Jean-Pierre Frontière des domaines bornés cerclés homogènes. (English summary) **(80c:32032)**

Vogt, Dietmar *See* **Börgens, Manfred; et al., (80m:46008)**

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Abuabara, Teófilo On the Paley-Wiener-Schwartz theorem in infinite dimensions. (Italian summary) **80c:46050**

Assouad, Patrice Produit tensoriel, distances extrémales et réalisation de covariances. (English summary) **80e:46030**

Attéia, Marc Topologie forte sur un espace φ-hilbertien. (English summary) **80k:46049**

(*with* Dedieu, Jean-Pierre) Topologie faible sur un espace φ-hilbertien. (English summary) **80k:46050**

Dedieu, Jean-Pierre *See* **Attéia, Marc, 80k:46050**

Egorov, A. D. A class of functions in Hilbert space that are uniformly approximable by polynomials, with prescribed weight. (Russian. English summary) **80d:46085**

Górniak, Janusz Remarks on positive definite operator valued functions in linear spaces. **80d:46086**

Guseinov, R. V. Some applications of the Fourier-Wiener transform. I. (Russian) **80c:46031**

Kluvánek, Igor Cylindrical measures and vector measures. **80c:46051**

Représentations intégrales d'évolutions perturbées. (English summary) **80d:46087**

Krée, Paul Formes et coformes sur un espace nucléaire complet. (English summary) **80d:46088**

Calcul d'intégrales et de dérivées en dimension infinie. **80k:46051**

Kuo, Hui Hsiung Differential calculus for measures on Banach spaces. **80c:46052**

The chain rule for differentiable measures. **80d:46089**

Sakamaki, Kazuo (*with* Takahashi, Wataru) Systems of convex inequalities and their applications. **80j:46075**

Stegall, Charles Optimization of functions on certain subsets of Banach spaces. **80e:46022**

Takahashi, Wataru *See* **Sakamaki, Kazuo, 80j:46075**

Secondary classifications:

Akilov, G. P. (*with* Kutateladze, S. S.) ★Упорядоченные векторные пространства. (Russian) [Ordered vector spaces] **(80i:46007)**

Alò, Richard A. (*with* de Korvin, André; Vo Van Tho) Nonlinear integration on L^p-spaces. (80d:47098)
Andrews, Kevin T. Dunford-Pettis sets in the space of Bochner integrable functions. (80f:46041)
Arosio, Alberto (*with* Ferreira, Artur V.) Caractérisation spectrale des fonctionnelles linéaires multiplicatives. (English summary) (80b:46059)
Attouch, Hédy Convergence de fonctionnelles convexes. (80d:49007)
Audounet, Jacques Potentiels et espaces quasi-hilbertiens. (80f:46012)
Brooks, James K. (*with* Lewis, Paul W.) Operators on continuous function spaces and convergence in the spaces of operators. (80d:47050)
Bucan, G. P. Multiplicative parametric semigroups. (Russian. English summary) (80k:47050)
(Bukovskiĭ, V. A.) *See* Akilov, G. P.; et al., (80f:46007)
Bykov, Ja. V. *See* Kabulov, R., (80e:47051)
Čekanov, Ju. N. *See* Vladimirov, A. A.; et al., (80f:49021)
Dragomirescu, Mihai The ascendent unions separation theorem and a sharp nonconvex extension of Fenchel's duality theorem. (80h:90137)
Ferreira, Artur V. *See* Arosio, Alberto, (80b:46059)
Gattinger, Matthias Representation theorems for operators and measures on abstract Wiener spaces. (80d:28031)
Graves, William H. Universal Lusin measurability and subfamily summable families in abelian topological groups. (80b:28012)
Gwinner, Joachim ★Nichtlineare Variationsungleichungen mit Anwendungen. (80g:47075)
Ha, Chung Wei On systems of convex inequalities. (80j:46026)
Heinze, Joachim Über die rechts-symmetrische Algebra und die Lie-Algebra der konvergenten Potenzreihen eines Banachraumes. (80g:17007)
Helton, Jon C. (*with* Stuckwisch, Stephen) An approximation technique for nonlinear integral operations. (80b:45026)
Nonlinear operations and the solution of integral equations. (80b:45023)
Hoàng Tuy *See* Phạm Cảnh Du'o'ng, (80j:49016)
Ioffe, Alexandre D. (*with* Tihomirov, V. M.) ★Theorie der Extremalaufgaben. (80d:49001a)
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Kabulov, R. (*with* Bykov, Ja. V.) Unbounded solutions of a certain class of nonlinear equations. (Russian. Kazakh summary) (80e:47051)
Karakozov, S. D. *See* Vuvunikjan, Ju. M., (80j:46069)
Khurana, Surjit Singh Radon-Nikodým property for vector-valued integrable functions. (French summary) (80f:46043)
de Korvin, André *See* Alò, Richard A.; et al., (80d:47098)
Kounzl, Peter (*with* Wriedt, Michael) Starke Lösbarkeit von Optimierungsaufgaben. (80e:49008)
Krée, Paul Methods of functional analysis in the study of random phenomena. (80f:60008)
Kusraev, A. G. Subdifferential mappings of convex operators. (Russian) (80f:47062)
Kutateladze, S. S. *See* Akilov, G. P., (80f:46007)
Lascar, Bernard Théorème de Cauchy-Kovalevsky et théorème d'unicité d'Holmgren pour des fonctions analytiques d'une infinité de variables. (80g:34062)
Lebourg, Gérard Solutions "en densité" de problèmes d'optimisation paramétrés. (English summary) (80g:49008)
Lewis, Paul W. *See* Brooks, James K., (80d:47050)
(Luderer, Bernd) *See* Ioffe, Alexandre D.; et al., (80d:49001a)
Maeda, Michie On type$(r, 1)$ cylindrical measures on Banach spaces with Schauder bases. (80i:28031)
(Makowski, Karol) *See* Ioffe, Alexandre D.; et al., (80d:49001b)
Marias, Michel Espaces du type Sobolev sur un espace de Hilbert complexe. (80j:46056)
Martin, D. H. Some function classes closed under infimal convolution. (80a:49018)
Nesterov, Ju. E. *See* Vladimirov, A. A.; et al., (80f:49021)
Nougaïs-Sainte-Beuve, Marie-France Semi-continuité inférieure de fonctionnelles intégrales. (English summary) (80e:49009)
Noverraz, Philippe Gaussian measure of polar sets in separable Banach spaces. (80k:28015)
Penot, Jean-Paul Calcul sous-différentiel et optimisation. (80e:58018)
Phạm Cảnh Du'o'ng (*with* Hoàng Tuy) Stability, surjectivity and local invertibility of nondifferentiable mappings. (80j:49016)
Redheffer, Raymond (*with* Volkmann, Peter) Differential equations in operator algebras. I. Invariance of the Siegel disk. (80i:34108)
Rockafellar, R. Tyrrell ★La théorie des sous-gradients et ses applications à l'optimisation. (80g:49023)
Romanov, V. A. Limits of quasi-invariant measures in Hilbert space. (Russian) (80e:28021)
Ryan, Raymond A. Dunford-Pettis properties. (Russian summary) (80m:46018)
Salinetti, Gabriella (*with* Wets, Roger J.-B.) Erratum: "On the relations between two types of convergence for convex functions" (J. Math. Anal. Appl. **60** (1977), no. 1, 211–226). (80a:90114)
Šavgulidze, E. T. The direct equation of Kolmogorov for measures in a Hilbert scale of spaces. (Russian. English summary) (80j:60113)
Schmidt, Klaus Espaces vectoriels réticulés, décompositions de Riesz, et caractérisations de certains processus de fonctions d'ensembles. (English summary) (80h:60068)
Smoljanov, O. G. A method for proving uniqueness theorems for evolution differential equations. (Russian) (80b:34082)
Stefani, G. (*with* Zecca, Pietro) Properties of convex sets with application to differential theory of multivalued functions. (80i:49035)
Stuckwisch, Stephen *See* Helton, Jon C., (80b:45026)
Takahashi, Yasuji Partially admissible shifts on linear topological spaces. (80m:60011)
Turski, Jan Feynman-type integrals defined in terms of general cylindrical approximations. (80k:81034)
Tsarskiĭ, V. I. Representation of the solution of some diffraction problems in terms of Gaussian path integrals. (Russian) (80c:78019)
Thibault, Lionel Mathematical programming and optimal control problems defined by compactly Lipschitzian mappings. (80f:49019)
Thomas, Erik G. F. Représentations intégrales dans les cônes convexes conucléaires et applications. (80e:46011)
Tihomirov, V. M. *See* Ioffe, Alexandre D., (80d:49001a) *and* Ioffe, Alexandre D., (80d:49001b)
(Vanderstraeten-Tilquin, Godelièvre) *See* Rockafellar, R. Tyrrell, (80g:49023)
Vladimirov, A. A. (*with* Nesterov, Ju. E.; Čekanov, Ju. N.) Uniformly quasiconvex functionals. (Russian) (80f:49021)
Volkmann, Peter *See* Redheffer, Raymond, (80i:34108)
Vo Van Tho *See* Alò, Richard A.; et al., (80d:47098)
Vuvunikjan, Ju. M. (*with* Karakozov, S. D.) The V-principle and Paley-Wiener theorems for vector-valued generalized functions. (Russian) (80j:46069)
Wets, Roger J.-B. *See* Salinetti, Gabriella, (80a:90114)
Wriedt, Michael *See* Kounzl, Peter, (80e:49008)
Zecca, Pietro *See* Stefani, G., (80i:49035)
Zeidler, Eberhard ★Vorlesungen über nichtlineare Funktionalanalysis. III. (80g:49001)

46Hxx Topological algebras, normed rings and algebras, Banach algebras {For group algebras, convolution algebras and measure algebras, see 43–XX.}

Vidav, Ivan ★Banachove algebre. (Slovenian) [Banach algebras] 80h:46068

Secondary classifications:

Page, Warren ★Topological uniform structures. (80c:46001)

46H05 General theory

Abel, M. The density property in algebras of A-valued continuous functions. 80d:46090
Alexiewicz, Andrzej Linear algebras with the topology of Roelcke. 80h:46052
Amuriăriței, Gheorghe Topological algebras with invertible elements. (Romanian. French summary) 80j:46076
Apostol, Constantin The spectrum and the spectral radius as functions in Banach algebras. (Russian summary) 80h:46069
Arosio, Alberto (*with* Ferreira, Artur V.) Une caractérisation des fonctionnelles linéaires multiplicatives dans les algèbres topologiques générales. (English summary) 80b:46054
Benkö, Iosif Sectional representation of normed modules. (Romanian. English summary) 80m:46046
Berman, Stephen Jay Absolute continuity in the dual of a Banach algebra. 80f:46047
Bhatt, Subhash Spectrally convex Banach algebras. 80f:46048
Bonsall, F. F. Jordan subalgebras of Banach algebras. 80i:46039
Chojnacki, Wojciech On Banach algebras which are Hilbert spaces. 80d:46091
Dales, H. G. Automatic continuity: a survey. 80c:46053
Dixon, P. G. Approximate identities in normed algebras. II. 80b:46055
Spectra of approximate identities in Banach algebras. 80b:46070
Ferreira, Artur V. *See* Arosio, Alberto, 80b:46054
Fong, Che Kao (*with* Sourour, A. R.) Renorming, similarity and numerical ranges. 80i:46040
Husain, Taqdir (*with* Srinivasan, A.) Numerical range theory for pseudo-Banach algebras. 80m:46047
Johnson, David L. (*with* Lahr, Charles D.) Dual A^*-algebras of the first kind. 80f:46049a
(*with* Lahr, Charles D.) Multipliers of A^*-algebras. 80f:46049b
Johnson, Peter D., Jr. Spectral radius and seminorms in finite-dimensional algebras. 80c:46032
Khasbardar, Sunanda (*with* Thakare, Nimbakrishna) Commutativity in a Banach algebra. 80a:46023
Lahr, Charles D. *See* Johnson, David L., 80f:46049a *and* Johnson, David L., 80f:46049b
Lai, Hang Ch'ing (*with* Yeh, Fang Bo) Numerical ranges of the tensor products of elements. 80f:46050
Litvinov, G. L. Dual topological algebras and topological Hopf algebras. (Russian) 80a:46024
Sinclair, Allan M. Bounded approximate identities, factorization, and a convolution algebra. 80c:46054
Smith, R. R. On Banach algebra elements of thin numerical range. 80f:46051
(*with* Ward, Joseph D.) Applications of convexity and M-ideal theory to quotient Banach algebras. 80h:46071
Soldatov, A. P. On the Noether theory of operators. (Russian) 80g:46044
Sourour, A. R. *See* Fong, Che Kao, 80i:46040
Srinivasan, A. *See* Husain, Taqdir, 80m:46047
Thakare, Nimbakrishna *See* Khasbardar, Sunanda, 80a:46023
Tomiuk, Bohdan J. (*with* Yood, Bertram) Topological algebras with dense socle. 80f:46052
Ward, Joseph D. *See* Smith, R. R., 80h:46071
Wong, Pak Ken On certain quasi-complemented and complemented Banach algebras. 80d:46092
Yeh, Fang Bo *See* Lai, Hang Ch'ing, 80f:46050
Yood, Bertram *See* Tomiuk, Bohdan J., 80f:46052

Secondary classifications:

Aupetit, Bernard (*with* Zemánek, Jaroslav) On the spectral radius in real Banach algebras. (Russian summary) (80e:46034)
Friedberg, Stephen H. Compact multipliers on Banach algebras. (80f:43011)
Hennefeld, Julien $L(X)$ as a subalgebra of $K(X)^{**}$. (80j:47057)
Kaushik, Vimla Projective and inductive limits of m-convex algebras and tensor products of topological algebras. (80h:46115)
Lau, Anthony To Ming Characterizations of amenable Banach algebras. (80a:46036)

Pták, Vlastimil Perturbations and continuity of the spectrum. (80g:47016)
Żelazko, Wiesław An axiomatic approach to joint spectra. I. (80h:46076)
Zemánek, Jaroslav *See* Aupetit, Bernard, (80e:46034)

46H10 Ideals and subalgebras

Bade, W. G. (*with* Curtis, P. C., Jr.) Prime ideals and automatic continuity problems for Banach algebras. 80j:46077
Curtis, P. C., Jr. *See* Bade, W. G., 80j:46077
Ferreira, Artur V. (*with* Gigante, G.; Venturi, A.) A theorem of the Gleason-Kahane-Żelazko type for general topological algebras. (Italian summary) 80e:46025
Gigante, G. *See* Ferreira, Artur V.; et al., 80e:46025
Tomiuk, Bohdan J. On some properties of Segal algebras and their multipliers. 80h:46072
Venturi, A. *See* Ferreira, Artur V.; et al., 80e:46025

Secondary classifications:

Dowson, H. R. (*with* Gillespie, T. A.) A representation theorem for a complete Boolean algebra of projections. (80m:47039)
Gillespie, T. A. *See* Dowson, H. R., (80m:47039)
Müller, Jürgen Topologische Operatorenideale auf einem separablen Hilbertraum. (Russian and English summaries) (80b:47046)
Pietsch, Albrecht Rosenthal's inequality and its application in the theory of operator ideals. (80m:47041)
Żelazko, Wiesław Concerning nonremovable ideals in commutative *m*-convex algebras. (80l:46041)

46H15 Representations

Barnes, Bruce A. Properties of representations of Banach algebras with approximate identities. 80g:46045
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Takahasi, Sin-ei Dixmier's representation theorem of central double centralizers on Banach algebras. 80j:46078
Zimakov, N. P. (*with* Mironov, A. V.) Regular representations and normability of topological algebras over a semifield. (Russian) 80b:46056

Secondary classifications:

Buoni, John J. (*with* Klein, A.) On the generalized Calkin algebra. (80e:47039)
Klein, A. *See* Buoni, John J., (80e:47039)

46H20 Structure, classification

Alexiewicz, Andrzej The Wiweger topology in two-norm algebras. 80b:46057
Aupetit, Bernard Nouvelles méthodes analytiques dans la théorie des algèbres de Banach. 80d:46093
Mallios, Anastasios Generalized structure sheaf envelopes of topological function algebra spaces. (Greek summary) 80j:46079
Zemánek, Jaroslav Idempotents in Banach algebras. 80h:46073

Secondary classifications:

Bonnard, Michel Sur la décomposition d'une algèbre topologique en produit cartésien d'idéaux. (80d:46103)
Ferreira, Artur V. (*with* Tomassini, G.) Finiteness properties of topological algebras. I. (80d:46101)
Kim, Sun Hae On the strongly harmonic algebras. (80k:16042)
Smith, R. R. An addendum to: "M-ideal structure in Banach algebras" [J. Funct. Anal. 27 (1978), no. 3, 337–349; MR 57 #7175] by Smith and J. D. Ward. (80j:46087)
Tomassini, G. *See* Ferreira, Artur V., (80d:46101)
Torgašev, Aleksandar On the symmetric quaternionic Banach algebras. I. Geljfand theory. (80b:46067)
(Ward, Joseph D.) *See* Smith, R. R., (80j:46087)

46H25 Normed modules and Banach modules, topological modules (if not placed in 13–XX or 16–XX)

Ajupov, Š. A. Duality theory for Boolean normed modules. (Russian) 80a:46026
Baskakov, A. G. Spectral tests for the almost periodicity of the solutions of functional equations. (Russian) 80c:46055
Selivanov, Ju. V. Projectivity of certain Banach modules and the structure of Banach algebras. (Russian) 80g:46046
Sinclair, Allan M. Cohen's factorization method using an algebra of analytic functions. 80m:46048

Secondary classifications:

Bade, W. G. (*with* Curtis, P. C., Jr.) The structure of module derivations of Banach algebras of differentiable functions. (80e:46036)
Curtis, P. C., Jr. *See* Bade, W. G., (80e:46036)

46H30 Functional calculus [See also 47A60.]

Baillet, Michel Analyse spectrale des opérateurs hermitiens d'une espace de Banach. 80j:46080
Busby, Robert C. (*with* Fair, Wyman) Convergence of "periodic in the limit" operator continued fractions. 80m:46049
Fair, Wyman *See* Busby, Robert C., 80m:46049
Moscalova, M. V. A new formula for $\ln(e^A e^B)$ in terms of the commutators of the elements A and B. (Russian) 80b:46058

Secondary classifications:

Vasilescu, Florian-Horia ★Calcul funcţional analitic multidimensional. (Romanian) [Multidimensional analytic functional calculus] (80l:47027)

46H99 None of the above, but in this section

Arosio, Alberto (*with* Ferreira, Artur V.) Caractérisation spectrale des fonctionnelles linéaires multiplicatives. (English summary) 80b:46059
Béllissard, Jean (*with* Iochum, Bruno) L'algèbre de Jordan d'un cône autopolaire facialement homogène. (English summary) 80c:46056
Dixon, P. G. Scalar homomorphisms on algebras of infinitely long polynomials with an application to automatic continuity theory. 80h:46074
Edwards, C. M. On the facial structure of a JB-algebra. 80e:46033
On the centres of hereditary JBW-subalgebras of JBW-algebra. 80d:46094
Ferreira, Artur V. *See* Arosio, Alberto, 80b:46059
Iochum, Bruno *See* Béllissard, Jean, 80c:46056
Vuza, Dan A generalisation of Ghika rings. (Romanian. French summary) 80k:46053

Secondary classifications:

Bayen, François On the convergence of the Zassenhaus formula. (80h:22022)
Bucan, G. P. Multiplicative parametric semigroups. (Russian. English summary) (80k:47050)
Fitzpatrick, W. J. (*with* Grimm, L. J.) Linear functional-differential equations in a Banach algebra. (80i:34127)
Grimm, L. J. *See* Fitzpatrick, W. J., (80i:34127)
Kaijser, Sten Some representation theorems for Banach lattices. (80f:46020)
Mattila, Kirsti On proper boundary points of the spectrum and complemented eigenspaces. (80i:47003)
Schmüdgen, Konrad Lokal multiplikativ konvexe Op^*-Algebren. (80m:47042)
Shultz, Frederic W. On normed Jordan algebras which are Banach dual spaces. (80b:46096)

46Jxx Commutative Banach algebras and commutative topological algebras

Secondary classifications:

Tanaka, Jun-ichi Some remarks on simply invariant subspaces on compact abelian groups. (80b:43005)
Vidav, Ivan ★Banachove algebre. (Slovenian) [Banach algebras] (80h:46068)

46J05 General theory

Aupetit, Bernard (*with* Zemánek, Jaroslav) On the spectral radius in real Banach algebras. (Russian summary) 80e:46034
Batikjan, B. T. Pointwise derivations of second and third order. (Russian. Armenian summary) 80d:46095
Kitover, A. K. The spectrum of automorphisms with weight, and the Kamowitz-Scheinberg theorem. (Russian) 80f:46053
Klimek, M. Remarks on derivations on normed algebras. 80h:46075
Levi, Sandro Erratum: "The multiplicative extension property in Banach algebras" (Bull. Sci. Math. (2) 101 (1977), no. 2, 189–208). 80c:46057
Mantero, Anna Maria (*with* Tonge, Andrew) Banach algebras and von Neumann's inequality. 80j:46081
Narmanlja, V. G. Linear equations whose solutions form a subalgebra. (Russian. Georgian and English summaries) 80c:46058
Tonge, Andrew *See* Mantero, Anna Maria, 80j:46081
Żelazko, Wiesław Concerning nonremovable ideals in commutative *m*-convex algebras. 80l:46041
An axiomatic approach to joint spectra. I. 80h:46076
Zemánek, Jaroslav *See* Aupetit, Bernard, 80e:46034

Secondary classifications:

Apostol, Constantin The spectrum and the spectral radius as functions in Banach algebras. (Russian summary) (80h:46069)
Arosio, Alberto (*with* Ferreira, Artur V.) Une caractérisation des fonctionnelles linéaires multiplicatives dans les algèbres topologiques générales. (English summary) (80b:46054)
Bade, W. G. (*with* Curtis, P. C., Jr.) Prime ideals and automatic continuity problems for Banach algebras. (80j:46077)
Barot, Jiří A multiplicative functional on the commutative topological field. (80b:12018)
Berman, Stephen Jay Absolute continuity in the dual of a Banach algebra. (80l:46047)
Craw, Ian Commutative abelian Galois extensions of a Banach algebra. (80g:46059)
Curtis, P. C., Jr. *See* Bade, W. G., (80j:46077)
Ferreira, Artur V. *See* Arosio, Alberto, (80b:46054)
Mel'nik, V. I. Multidimensional absolutely convergent Fourier transforms. (Russian) (80m:42024)

46J10 Banach algebras of continuous functions, function algebras

Aleksandrov, A. B. Discrete measures with compact nowhere dense support that are orthogonal to rational functions. (Russian. English summary) 80c:46059
Batty, C. J. K. Tensor products of compact convex sets and Banach algebras. 80c:46060
Borole, Aruna On the algebra of entire functions over a non-Archimedean field taking values in a non-Archimedean Banach algebra. 80k:46054

Delbaen, F. Weakly compact sets in L^1/H^1_0. **80c:46061**
Ellis, Alan J. A characterization of the state spaces of uniform algebras. **80d:46096**
Fisher, Stephen D. The decomposition of $C_r(K)$ into the direct sum of subalgebras. **80b:46060**
Globevnik, J. Analytic extensions and selections. **80b:46077**
Hag, Per Bounded extension property and p-sets. **80j:46082**
Hegde, Shankar A characterization of Z-separating algebras. **80e:46035**
Jakóbczak, Piotr On the existence of analytic structure in the spectrum of a uniform algebra. (Russian summary) **80b:46078**
Kramm, Bruno Gleason parts and boundary value integrals for certain Fréchet-nuclear algebras. **80j:46083**
Kumagai, Donna Subharmonic functions and uniform algebras. **80b:46055**
Nakazi, Takahiko On invariant subspaces of weak-* Dirichlet algebras. (Japanese) **80d:46097**
Helson's existence theorem of function algebras. **80b:46079**
Ohno, Yoshiki (*with* Yabuta, Kôzô) A theorem of Helson and Sarason in uniform algebras. **80b:46056**
Helson-Szegő-Sarason theorem for Dirichlet algebras. **80d:46098**
de Paepe, P. J. Maximality in sequences of function algebras. **80f:46054**
Rochberg, Richard The disk algebra is rigid. **80b:46057**
Deformation of uniform algebras. **80b:46058**
Szymański, Wacław Erratum to: "Antisymmetry and contractive representations of function algebras" [Proc. Amer. Math. Soc. **72** (1978), no. 2, 319–326; MR 80a:46028]. **80b:46059**
Tanaka, Jun-ichi A note on Helson's existence theorem. **80b:46061**
Wojtaszczyk, P. On weakly compact operators from some uniform algebras. **80f:46042**
Yabuta, Kôzô *See* **Ohno, Yoshiki, 80b:46056**
Zemánek, Jaroslav A simple proof of the Weierstrass-Stone theorem. **80c:46062**

Secondary classifications:

Abel, M. The density property in algebras of A-valued continuous functions. **(80d:46090)**
Aupetit, Bernard (*with* Wermer, John) Capacity and uniform algebras. **(80a:31001)**
Chen, Chang Pao On the intersections and the unions of Banach algebras. **(80k:46082)**
De-Michele, Leonede (*with* Mauceri, Giancarlo) On the Fourier-Stieltjes algebra of Euclidean motion groups. **(80m:43005)**
Ellis, Alan J. ★Topics in Banach spaces of continuous functions. **(80h:46032)**
Hegde, Shankar Some smoothness properties of measures on topological spaces. **(80k:46034)**
Janas, J. Note on the spectral inclusion theorem for Toeplitz operators. **(80a:47039)**
Lambov, D. L. (*with* Tonev, Toma V.) Some function-algebraic properties of the algebra of generalized analytic functions. (Russian) **(80d:43006)**
Mauceri, Giancarlo *See* **De-Michele, Leonede, (80m:43005)**
Takács, Lajos On fluctuations of sums of random variables. **(80g:60069)**
Tomiyama, Jun (*with* Yabuta, Kôzô) General short exact sequence theorem for Toeplitz operators of uniform algebras. **(80f:47042)**
Tonev, Toma V. *See* **Lambov, D. L., (80d:43006)**
Wermer, John *See* **Aupetit, Bernard, (80a:31001)**
Yabuta, Kôzô *See* **Tomiyama, Jun, (80f:47042)**
Zafran, Misha On the symbolic calculus in homogeneous Banach algebras. **(80g:43007)**

46J15 Banach algebras of differentiable or analytic functions, H^p-spaces [See also 30A98, 32A35, 32E25, 42B30.]

Ando, Tsuyoshi On the predual of H^∞. **80c:46063**
Bade, W. G. (*with* Curtis, P. C., Jr.) The structure of module derivations of Banach algebras of differentiable functions. **80e:46036**
Chow, Kwang Nan (*with* Protas, David) The maximal ideal space of bounded, analytic, Dirichlet finite functions. **80b:46062**
Curtis, P. C., Jr. *See* **Bade, W. G., 80e:46036**
Delbaen, F. The Pełczyński property for some uniform algebras. **80f:46043**
Fritz, Günter Charakterisierungen einiger Funktionenalgebren. (English summary) **80b:46063**
Georgijević, Dušan On a class of Banach spaces of analytic functions. **80b:46080**
Kon, S. H. Inner functions and the maximal ideal space of $H^\infty(U^n)$. **80e:46037b**
Inner functions on the polydisc. **80e:46037a**
König, Heinz On the Marcel Riesz estimation for conjugate functions in the abstract Hardy algebra situation. **80k:46060**
Kramm, Bruno Ein Approximationssatz für holomorphe Funktionen auf nicht-kompakten Riemannschen Flächen. (English summary) **80j:46084**
Krasičkov-Ternovskiĭ, I. F. Local description of closed ideals and submodules of analytic functions of a single variable. I. (Russian) **80f:46044**
Kriete, Thomas On the structure of certain $H^2(\mu)$ spaces. **80f:46045**
McDonald, Gerard The maximal ideal space of $H^\infty + C$ on the ball in $\mathbf{C}^n$. **80f:46055**
Mahly, Paul S. Ergodic Hardy spaces and duality. **80b:46081**
O'Farrell, Anthony G. Analytic capacity and equicontinuity. **80d:46099**
Petzeltová, Hana (*with* Vrbová, Pavla) Factorization in the algebra of rapidly decreasing functions on $\mathbf{R}^n$. **80f:46056**
Protas, David *See* **Chow, Kwang Nan, 80b:46062**
von Renteln, M. Topologische Nullteiler und endlich erzeugte Ideale in gewissen Algebren holomorpher Funktionen. **80d:46100**
Selby, M. A. On completeness with respect to a Carathéodory-like metric. **80a:46027**
Širokov, N. A. Ideals and factorization in algebras of analytic functions that are smooth up to the boundary. (Russian) **80j:46085**
Vrbová, Pavla *See* **Petzeltová, Hana, 80f:46056**
Wojtaszczyk, P. Decompositions of H_p spaces. **80k:46061**

Secondary classifications:

Axler, Sheldon (*with* Chang, Sun Yung A.; Sarason, Donald) Products of Toeplitz operators. **(80d:47039)**
Chang, Sun Yung A. *See* **Axler, Sheldon; et al., (80d:47039)**
Chaumat, Jacques (*with* Chollet, Anne-Marie) Peak sets for $A^\infty(D)$. **(80m:32021)**
Ch'ên, Wu Yung Remarks on H^p spaces over bounded symmetric domains. **(80d:32031)**
Chollet, Anne-Marie *See* **Chaumat, Jacques, (80m:32021)**
Ephraim, Robert Multiplicative linear functionals of Stein algebras. **(80c:32016)**
Georgijević, Dušan Décompositions de l'espace H^p par des sous-espaces de type spécial. (English summary) **(80f:46025)**
Hrušchëv, S. V. The problem of simultaneous approximation and of removal of the singularities of Cauchy type integrals. (Russian) **(80j:30055)**
Jewell, Nicholas P. (*with* Krantz, Steven George) Toeplitz operators and related function algebras on certain pseudoconvex domains. **(80h:47033)**
Kakichev, V. A. Factorization and γ-factorization of functions belonging to a Wiener ring that are defined on the product of a circle and the compactified real line. (Russian) **(80g:32008)**
Kon, S. H. Inner functions and the maximal ideal space of $H^\infty(U^n)$. **(80c:32046)**
Inner functions and the maximal ideal space of $L^\infty(T^n)$. **(80c:32006)**
Krantz, Steven George *See* **Jewell, Nicholas P., (80h:47033)**
McDonald, Gerard (*with* Sundberg, C.) Toeplitz operators on the disc. **(80h:47034)**
Mujica, Jorge Ideals of holomorphic functions on Fréchet spaces. **(80f:32026)**
Complex homomorphisms of the algebras of holomorphic functions on Fréchet spaces. **(80j:46074)**
Nakazi, Takahiko Invariant subspaces and translation invariant cocycles. **(80f:43005)**
O'Farrell, Anthony G. Rational approximation in Lipschitz norms. II. **(80m:30044)**
Sarason, Donald ★Function theory on the unit circle. **(80d:30035)**
See also **Axler, Sheldon; et al., (80d:47039)**
Sledd, W. T. On multipliers of H^p spaces. **(80b:42010)**
Snyder, A. K. Universal interpolating sets and the Nevanlinna-Pick property in Banach spaces of functions. **(80d:46066)**
Sundberg, C. *See* **McDonald, Gerard, (80h:47034)**
Weyland, Nicholas A note on the zeros of H^p functions. **(80h:32014)**

46J20 Ideals, maximal ideals, boundaries

Behrens, Ernst-August Formal power series over commutative N-algebras. **80b:46064**
Ferreira, Artur V. (*with* Tomassini, G.) Finiteness properties of topological algebras. I. **80d:46101**
Globevnik, J. Boundaries for polydisc algebras in infinite dimensions. **80f:46046**
Maltese, George Convexity methods and the Choquet boundary in Banach algebras. (Italian summary) **80b:46065**
Naghshineh-Ardjmand, Mohsen Generalized argument principle for commutative Banach algebras. **80b:46066**
Širokov, N. A. Standard ideals of the algebra H^1_*. (Russian) **80k:46082**
Tomassini, G. *See* **Ferreira, Artur V., 80d:46101**
Tonev, Toma V. Generalized analytic structure in the spectrum of a uniform algebra. **80d:46102**
Torgašev, Aleksandar On the symmetric quaternionic Banach algebras. I. Gelʹfand theory. **80b:46067**

46J25 Representations

Kosiek, M. A decomposition of operator representations of the algebra $R(K_1 \times K_2)$. **80j:46086**
Mlak, W. Szegő measures related to compact plane sets. **80b:46068**
Szymański, Wacław Antisymmetry and contractive representations of function algebras. **80a:46028**

Secondary classifications:

Vuza, Dan A generalisation of Ghika rings. (Romanian. French summary) **(80k:46053)**

46J30 Subalgebras

Smith, R. R. An addendum to: "M-ideal structure in Banach algebras" [J. Funct. Anal. **27** (1978), no. 3, 337–349; MR 57 #7175] by Smith and J. D. Ward. **80j:46087**
(Ward, Joseph D.) *See* **Smith, R. R., 80j:46087**

46J35 Structure, classification

Bonnard, Michel Sur la décomposition d'une algèbre topologique en produit cartésien d'idéaux. **80d:46103**
Ehmke, Horst Kommutative Banachalgebren und hermitesch-äquivalente Elemente. (English summary) **80d:46104**
Sołtysiak, Andrzej On Banach algebras with closed set of algebraic elements. **80c:46064**

Secondary classifications:

Mantero, Anna Maria (*with* Tonge, Andrew) Some remarks on the injective tensor product and Banach algebras. (Italian summary) **(80d:46123)**
Tonge, Andrew *See* **Mantero, Anna Maria, (80d:46123)**

46J99 None of the above, but in this section

Govaerts, W. Homomorphisms of weighted algebras of continuous functions. **80a:46029**
Saworotnow, Parfeny P. H^*-algebra valued measure on a locally compact space. **80f:46057**

Secondary classifications:

Achour, Abdennebi (*with* Trimèche, Khélifa) Opérateurs de translation généralisée associés à un opérateur différentiel singulier sur un intervalle borné. (English summary) **80f:47064**
Bayen, François On the convergence of the Zassenhaus formula. **80b:22022**
Murphy, Gerard J. Commutative non-Archimedean C^*-algebras. **80f:46063**
Praeworska-Rolewicz, Danuta Integration of a unit in linear rings with right invertible operators. **80k:47003**
Trimèche, Khélifa *See* **Achour, Abdennebi, 80f:47064**
Vasilescu, Florian-Horia ★Calcul funcţional analitic multidimensional. (Romanian) [Multidimensional analytic functional calculus] **80f:47027**

46Kxx Rings and algebras with an involution

46K05 General theory

Bojadliev, Hristo N. Partially ordered B^*-equivalent Banach algebras. **80f:46047**
Kunze, Wolfgang Zur algebraischen Struktur der GC^*-Algebren. **80k:46062**
Martinez Moreno, J. JV-algebras. **80m:46050**
Sebestyén, Z. Every C^*-seminorm is automatically submultiplicative. **80c:46065**

Secondary classifications:

Bhatt, Subhash Spectrally convex Banach algebras. **80f:46048**
Chojnacki, Wojciech On Banach algebras which are Hilbert spaces. **80d:46091**
Ehmke, Horst Kommutative Banachalgebren und hermitesch-äquivalente Elemente. (English summary) **80d:46104**
Gudder, Stanley P. A Radon-Nikodým theorem for $*$-algebras. **80g:46057**
Reid, William T. Some aspects of oscillation and boundary problem theory for Hamiltonian systems in a B^*-algebra. **80h:34073**
Wong, Pak Ken On certain quasi-complemented and complemented Banach algebras. **80d:46092**

46K10 Representations

Jung, Ilboug A note on pure states and strictly pure states of Banach $*$-algebras. **80d:46105**
Shirali, Satish On Jordan $*$ representations of Banach algebras. **80d:46106**
Todorov, Todor Stefanov An irreducibility criterion for operator algebras in a Hilbert space. (Bulgarian. Russian and English summaries) **80a:46030**
Wawrzyńczyk, Antoni Cyclicity and generalized cyclicity of representations of topological algebras with approximate unit. (Russian summary) **80j:46088**

46K15 Hilbert algebras

Figà-Talamanca, Alessandro (*with* Mauceri, Giancarlo) A characterization of nonatomic Hilbert algebras. **80h:46083**
Inoue, Atsushi L^p-spaces and maximal unbounded Hilbert algebras. **80i:46048**
Mauceri, Giancarlo *See* **Figà-Talamanca, Alessandro, 80h:46083**
Riedel, Norbert Über die Zerlegung von Operatoren in topologischen direkten Integralen von Hilberträumen. **80a:46031**

Secondary classifications:

van Daele, Alfons A framework to study commutation problems. (French summary) **80k:46066**
Johnson, David L. (*with* Lahr, Charles D.) Dual A^*-algebras of the first kind. **80f:46049a**
(*with* Lahr, Charles D.) Multipliers of A^*-algebras. **80f:46049b**
Lahr, Charles D. *See* **Johnson, David L., 80f:46049a** *and* **Johnson, David L., 80f:46049b**

46K99 None of the above, but in this section

Čilin, V. I. Homomorphisms of topological O^*-algebras. (Russian) **80h:46084**
Topological O^*-algebras. I. (Russian) **80j:46089a**
Topological O^*-algebras. II. (Russian) **80j:46089b**
Youngson, M. A. Equivalent norms on Banach Jordan algebras. **80i:46049**
Hermitian operators on Banach Jordan algebras. **80j:46090**

46Lxx C^*-algebras and von Neumann (W^*-) algebras [See also 22D25.]

Anantharaman-Delaroche, Claire *See* **Combes, F.; et al., 80d:46107**
Combes, F. (*with* Anantharaman-Delaroche, Claire; Denizeau, Yves; Enoch, M.; Schwartz, Jean-Marie) ★Représentations des groupes localement compacts et applications aux algèbres d'opérateurs. **80d:46107**
Denizeau, Yves *See* **Combes, F.; et al., 80d:46107**
Enoch, M. *See* **Combes, F.; et al., 80d:46107**
Schwartz, Jean-Marie *See* **Combes, F.; et al., 80d:46107**
Orléans *See* **Combes, F.; et al., 80d:46107**
Séminaire:
Analyse Fonctionnelle *See* **Combes, F.; et al., 80d:46107**

46L05 C^*-algebras, general theory

Akemann, Charles A. (*with* Pedersen, Gert Kjaergård) Central sequences and inner derivations of separable C^*-algebras. **80m:46051**
Alfsen, Erik M. (*with* Shultz, Frederic W.) On noncommutative spectral theory and Jordan algebras. **80h:46085**
Anderson, Joel A maximal abelian subalgebra of the Calkin algebra with the extension property. **80a:46032**
On unitary equivalence of representations of C^*-algebras. **80k:46063**
Archbold, Robert J. On the norm of an inner derivation of a C^*-algebra. **80j:46091**
On the Dixmier property of certain algebras. **80h:46086**
Baaj, Saad Prolongement d'un poids. (English summary) **80d:46108**
Batty, C. J. K. Unbounded derivations of commutative C^*-algebras. **80d:46109**
Blackadar, Bruce E. Weak expectations and nuclear C^*-algebras. **80d:46110**
Bratteli, Ola (*with* Herman, Richard H.) Unbounded derivations of C^*-algebras and corresponding dynamics. **80h:46087**
(*with* Elliott, George A.) Structure spaces of approximately finite-dimensional C^*-algebras. II. **80d:46111**
Chi, Doug Pyo Which selfadjoint operator in the domain of a closed derivation satisfies the domain problem? **80b:46069**
Choi, Man Duen A simple C^*-algebra generated by two finite-order unitaries. **80j:46092**
Chu, Cho Ho On central traces and groups of symmetries of order unit Banach spaces. **80m:46052**
Cuntz, Joachim (*with* Pedersen, Gert Kjaergård) Equivalence and traces on C^*-algebras. **80m:46053**
Davies, E. Brian Dilations of completely positive maps. **80a:46033**
Do Hgok Z'ep The structure of C^*-algebras of type I. (Russian. French summary) **80k:46064**
Dupré, Maurice J. Duality for C^*-algebras. **80a:46034**
Dynin, Alexander Inversion problem for singular integral operators: C^*-approach. **80c:46066**
Effros, Edward G. Aspects of noncommutative order. **80j:46093**
Nuclearity and the C^*-algebraic flip. **80h:46088**
(*with* Rosenberg, Jonathan) C^*-algebras with approximately inner flip. **80k:46065**
Elliott, George A. *See* **Bratteli, Ola, 80d:46111**
Enomoto, Masatoshi (*with* Watatani, Yasuo) A Perron-Frobenius type theorem for positive linear maps on C^*-algebras. **80f:46058**
Gardner, L. Terrell A dilation theorem for $|\cdot|$-preserving maps of $\mathcal{C}^*$-algebras. **80h:46089**
Linear maps of $\mathcal{C}^*$-algebras preserving the absolute value. **80h:46090**
Gootman, Elliot C. (*with* Rosenberg, Jonathan) The structure of crossed product C^*-algebras: a proof of the generalized Effros-Hahn conjecture. **80h:46091**
Green, Philip A primitive C^*-algebra with no nontrivial projections. **80g:46047**
Minimal primitive ideals of GCR C^*-algebras. **80b:46070**
Haagerup, Uffe An example of a nonnuclear C^*-algebra, which has the metric approximation property. **80j:46094**
Halpern, Herbert Spectra of operator equations and automorphism groups of von Neumann algebras. **80a:46035**
Hamana, Masamichi Injective envelopes of C^*-algebras. **80g:46048**
Herman, Richard H. *See* **Bratteli, Ola, 80h:46087**
Jensen, Helge Elbrønd Scattered C^*-algebras. II. **80f:46059**
Kishimoto, Akitaka (*with* Takai, Hiroshi) The Calkin algebra is not asymptotically abelian. **80h:46092**
Kruszyński, Paweł On positive maps of C^*-algebras. **80g:46049**
(*with* Woronowicz, S. L.) Partial transposition and nonextendible maps. **80j:46095**
Kubo, Fumio *See* **Kubo, Kyoko, 80g:46050a** *and* **Kubo, Kyoko, 80g:46050b**
Kubo, Kyoko (*with* Kubo, Fumio) Extreme points of the unit ball in an operator algebra. **80g:46050a**
(*with* Kubo, Fumio) Extreme points of convex sets in operator algebras. **80g:46050b**
Lau, Anthony To Ming Characterizations of amenable Banach algebras. **80a:46036**
Li, Bing Ren Real operator algebras. **80k:46050**
McIntosh, Alan Functions and derivations of C^*-algebras. **80m:46054**
McKennon, Kelly The quasimultiplier conjecture. **80h:46093**
Miers, C. Robert Centralizing mappings of operator algebras. **80j:46096**
Niknam, Assadollah On one-parameter automorphism groups of tensor products of C^*-algebras and their corresponding generators. **80b:46071**
Ôta, Shôichi Certain operator algebras induced by $*$-derivations in C^*-algebras on an indefinite inner product space. **80g:46051**
Pedersen, Gert Kjaergård Isomorphisms of UHF algebras. **80m:46055**
See also **Akemann, Charles A., 80m:46051** *and* **Cuntz, Joachim, 80m:46053**
Phillips, John (*with* Raeburn, Iain) Perturbations of C^*-algebras. II. **80a:46037**
(*with* Raeburn, Iain) Automorphisms of C^*-algebras and second Čech cohomology. **80e:46038**
Raeburn, Iain *See* **Phillips, John, 80a:46037** *and* **Phillips, John, 80e:46038**
Robertson, A. Guyan (*with* Yost, David T.) Chebyshev subspaces of operator algebras. **80j:46097**
Rosenberg, Jonathan *See* **Gootman, Elliot C., 80h:46091** *and* **Effros, Edward G., 80k:46065**
Saitô, Kazuyuki AW^*-algebras with monotone convergence property and examples by Takenouchi and Dyer. **80h:46094**
Sakai, Shôichirô Developments in the theory of derivations in C^*-algebras. **80b:46095**
Sauvageot, Jean-Luc Idéaux primitifs de certains produits croisés. **80d:46112**
Shultz, Frederic W. On normed Jordan algebras which are Banach dual spaces. **80h:46096**
See also **Alfsen, Erik M., 80h:46085**
Takahasi, Sin-ei A remark on Archbold's result. II. **80e:46039**
Takai, Hiroshi *See* **Kishimoto, Akitaka, 80h:46092**
Takemoto, Hideo On the algebraic reduction theory for countable direct summand C^*-algebras of separable C^*-algebras. **80j:46098**
Wassermann, Simon A pathology in the ideal space of $L(H)\otimes L(H)$. **80d:46113**
Watatani, Yasuo Kernels, potentials and complete positivity. **80j:46099**
See also **Enomoto, Masatoshi, 80f:46058**
Woronowicz, S. L. *See* **Kruszyński, Paweł, 80j:46095**

Wright, John David Maitland On C^*-algebras which are almost separably representable. **80j:46100**
Wright, Steve On orthogonalization of C^*-algebras. **80h:46072**
Yost, David T. *See* **Robertson, A. Guyan, 80j:46097**

Secondary classifications:

Anderson, Joel (*with* Bunce, John W.; Deddens, James A.; Williams, J. P.) C^*-algebras and derivation ranges. **(80l:47047)**
Archbold, Robert J. On the "flip-flop" automorphism of $C^*(S_1, S_2)$. **(80e:47038)**
Bunce, John W. *See* **Anderson, Joel; et al., (80l:47047)**
Deddens, James A. *See* **Anderson, Joel; et al., (80l:47047)**
Fialkow, Lawrence A. A note on unitary cross sections for operators. **(80k:47019)**
Johnson, David L. (*with* Lahr, Charles D.) Dual A^*-algebras of the first kind. **(80f:46049a)**
(*with* Lahr, Charles D.) Multipliers of A^*-algebras. **(80f:46049b)**
Kunze, Wolfgang Zur algebraischen Struktur der GC^*-Algebren. **(80k:46062)**
Lahr, Charles D. *See* **Johnson, David L., (80f:46049a)** *and* **Johnson, David L., (80f:46049b)**
Loupias, G. (*with* Mebkhout, M.) Extension of KMS states and angular momentum. **(80f:82009)**
Mebkhout, M. *See* **Loupias, G., (80f:82009)**
Moore, Steven M. • -algebras of unbounded operators in statistical mechanics. **(80c:81049)**
Pimsner, Mihai On the Ext-group of an AF-algebra. II. **(80j:46113)**
Pisier, Gilles Grothendieck's theorem for noncommutative C^*-algebras, with an appendix on Grothendieck's constants. **(80j:47027)**
Takahasi, Sin-ei Continuous linear functionals on order-related C^*-subalgebras. **(80h:46107)**
Williams, J. P. *See* **Anderson, Joel; et al., (80l:47047)**

46L10 von Neumann algebras, general theory

Alberti, Peter M. Remarks on the Σ-property of positive linear forms on W^*-algebras. **80h:46097**
Azoff, Edward A. Kaplansky-Hilbert modules and the self-adjointness of operator algebras. **80b:46073**
Brattelli, Ola (*with* Herman, Richard H.; Robinson, Derek W.) Perturbations of flows on Banach spaces and operator algebras. **80a:46038**
Breuer, Manfred (*with* de la Harpe, Pierre) Caractérisation des AW^*-algèbres semi-finies qui sont des algèbres de von Neumann. (English summary) **80f:46060**
Choda, Hisashi A Galois correspondence in a von Neumann algebra. **80g:46052**
Christensen, Erik Extension of derivations. **80d:46114**
Subalgebras of a finite algebra. **80l:46051**
van Daele, Alfons ★Continuous crossed products and type III von Neumann algebras. **80h:46074**
Fixed points and commutation theorems. **80k:46067**
A framework to study commutation problems. (French summary) **80k:46066**
Arveson's theory of spectral subspaces. **80h:46098**
See also **Rousseau, Ronny, 80k:46068**
Elliott, George A. On approximately finite-dimensional von Neumann algebras. II. **80h:46099**
Golodec, V. Ja. (*with* Nessonov, M. I.) Invariant states on asymptotically abelian factors of type III. (Russian) **80h:46100**
Handelman, David Stable range in AW^* algebras. **80h:46101**
de la Harpe, Pierre *See* **Breuer, Manfred, 80f:46060**
Herman, Richard H. *See* **Brattelli, Ola; et al., 80a:46038**
Hilsum, Michel Sur les sous-espaces spectraux d'un opérateur compact relativement à une algèbre de von Neumann. (English summary) **80h:46102**
Lance, E. Christopher Martingale convergence in von Neumann algebras. **80d:46115**
Lieberman, Arthur Entropy of states of a gauge space. **80b:46075**
Longo, Roberto A simple proof of the existence of modular automorphisms in approximately finite-dimensional von Neumann algebras. **80d:46116**
Ma, Jan Ch'ang Covariance algebras of operator-valued measures. **80b:46076**
McAsey, Michael (*with* Muhly, Paul S.; Saito, Kichi-Suke) Nonselfadjoint crossed products. **80j:46101a**
(*with* Muhly, Paul S.; Saito, Kichi-Suke) Nonselfadjoint crossed products (invariant subspaces and maximality). **80j:46101b**
Muhly, Paul S. *See* **McAsey, Michael; et al., 80j:46101a** *and* **McAsey, Michael; et al., 80j:46101b**
Nessonov, M. I. *See* **Golodec, V. Ja., 80h:46100**
Ochs, Wilhelm (*with* Spohn, Herbert) A characterization of the Segal entropy. **80a:46039**
Padmanabhan, A. R. Some new linear topological spaces (of operators), with trivial and nontrivial duals. **80h:46103**
Paschke, William L. Relative commutant of a von Neumann algebra in its crossed product by a group action. **80l:46052**
Plymen, R. J. Automorphic group representations: the hyperfinite II_1 factor and the Weyl algebra. **80m:46056**
Promislow, David Dimension of null spaces with applications to group rings. **80d:46117**
Rieffel, Marc A. The type of group measure space von Neumann algebras. **80g:46053**
Robinson, Derek W. *See* **Brattelli, Ola; et al., 80a:46038**
Rousseau, Ronny (*with* van Daele, Alfons) Crossed products of commutation systems. **80k:46068**
The covariance algebra of an extended covariant system. **80e:46040**
Saito, Kichi-Suke *See* **McAsey, Michael; et al., 80j:46101a** *and* **McAsey, Michael; et al., 80j:46101b**
Spohn, Herbert *See* **Ochs, Wilhelm, 80a:46039**
Thabeem, A. B. Decomposition of a von Neumann algebra relative to A^*-automorphism. **80h:46104**
Thompson, C. W. Dissipations on von Neumann algebras. **80d:46118**
Vanheuverzwijn, Paul Generators for quasifree completely positive semigroups. (French summary) **80h:46105a**
Errata to: "Generators for quasifree completely positive semigroups" (Ann. Inst. H. Poincaré Sect. A (N.S.)29 (1978), no. 1, 123–138). **80h:46105b**
Watatani, Yasuo Extensions of the inner automorphism groups of a von Neumann algebra. **80g:46054**
Woronowicz, S. L. ★Operator systems and their application to the Tomita-Takesaki theory. **80h:46106**
Wright, John David Maitland Sur les algèbres d'opérateurs. (English summary) **80l:46053**
Zsidó, László On the equality of two weights. **80d:46119**

Secondary classifications:

Cecchini, Carlo On two definitions of measurable and locally measurable operators. (Italian summary) **(80j:46105)**
Connes, Alain The von Neumann algebra of a foliation. **(80l:46057)**
Effros, Edward G. Aspects of noncommutative order. **(80j:46093)**
Gudder, Stanley P. (*with* Marchand, Jean-Paul; Wyss, Walter) Bures distance and relative entropy. **(80j:46109)**
Harris, Lawrence A. Operator Siegel domains. **(80g:32047)**
Haudidier, Dominique Sous-espaces spectraux d'un $A(K)$. (English summary) **(80g:46012)**
Jørgensen, Palle E. T. Selfadjoint extension operators commuting with an algebra. **(80j:47039)**
Kadison, Richard V. Similarity of operator algebras. **(80d:47069)**
Kaftal, Victor On the theory of compact operators in von Neumann algebras. II. **(80g:47046)**
Marchand, Jean-Paul *See* **Gudder, Stanley P.; et al., (80j:46109)**
Muratov, M. A. Convergences in a ring of measurable operators. (Russian) **(80k:47040)**
Peligrad, Costel Invariant subspaces of von Neumann algebras. II. **(80d:47070)**
Wyss, Walter *See* **Gudder, Stanley P.; et al., (80j:46109)**

46L30 States

Anderson, Joel Extreme points in sets of positive linear maps on $\mathfrak{B}(\mathfrak{H})$. **80k:46070**
Extensions, restrictions, and representations of states on C^*-algebras. **80k:46069**
Moore, Calvin C. Approximately finite von Neumann algebras. **80b:46077**
Takahasi, Sin-ei Continuous linear functionals on order-related C^*-subalgebras. **80h:46107**
Thabeem, A. B. A note on states of von Neumann algebras. (Czech and Russian summaries) **80j:46102**

46L35 Classifications, factors

Arzumanjan, V. A. (*with* Veršik, A. M.) Factor representations of the crossed product of a commutative C^*-algebra with its endomorphism semigroup. (Russian) **80l:46054**
Choda, Marie The crossed product of a full II_1-factor by a group of outer automorphisms. **80l:46055**
Hopenwasser, Alan The Cartan criterion fails for triangular subalgebras of a factor. **80k:46071**
Størmer, Erling Homogeneity of the state space of factors of type III_1. **80l:46056**
Takesaki, Masamichi Introduction to the flow of weights on factors of type III. **80b:46078**
Veršik, A. M. *See* **Arzumanjan, V. A., 80l:46054**

Secondary classifications:

Aubert, P. L. Projecteurs dans $\mathfrak{A}(G)$: un exemple. **(80k:22003)**

46L40 Automorphisms

Choda, Hisashi An automorphism fixing the fixed-point algebra of an automorphism group. **80h:46108**
Choda, Marie Extensions of the inner automorphism group of a factor. **80j:46104**
A characterization of crossed products of factors by discrete outer automorphism groups. **80j:46103**
Gardner, L. Terrell Positive maps of C^*-algebras commuting with a real continuous function. **80m:46057**
Kishimoto, Akitaka On invariant states and the commutant of a group of quasifree automorphisms of the CAR algebra. **80k:46072**
Phillips, John Automorphisms of full II_1 factors. II. **80c:46067**

Secondary classifications:

de la Harpe, Pierre (*with* Plymen, R. J.) Automorphic group representations: a new proof of Blattner's theorem. **(80g:22022)**
Jagannathan, R. (*with* Vasudevan, R.) Representations of a para-Bose algebra using only a single Bose field. **(80h:81039a)**
Kato, Tosio Spectral order and a matrix limit theorem. **(80j:47030)**
Plymen, R. J. Some recent results on infinite-dimensional spin groups. **(80g:22021)**
See also **de la Harpe, Pierre, (80g:22022)**
Vasudevan, R. *See* **Jagannathan, R., (80h:81039a)**

46L45 Decomposition theory

Secondary classifications:

Kehlet, Esben T. Disintegration theory on a constant field of nonseparable Hilbert spaces. **(80m:46043)**
Sutherland, Colin E. Type analysis of the regular representation of a nonunimodular group. **(80l:22018)**

46L50 Noncommutative integration, noncommutative probability

Accardi, Luigi Noncommutative Markov chains associated to a preassigned evolution: an application to the quantum theory of measurement. **80b:46079**

Ajupov, Š. A. *See* **Sarymsakov, T. A., 80b:46112**

Alesina, Alberto (*with* De-Michele, Leonede) Inequalities of Paley type for noncommutative martingales. **80a:46040**

Batty, C. J. K. Fubini and martingale theorems in C^*-algebras. **80g:46055**

The strong law of large numbers for states and traces of a W^*-algebra. **80k:46073**

Cecchini, Carlo On two definitions of measurable and locally measurable operators. (Italian summary) **80j:46105**

De-Michele, Leonede *See* **Alesina, Alberto, 80a:46040**

Driessler, Wulf (*with* Wilde, Ivan F.) Stochastic independence in noncommutative probability theory. **80h:46109**

Dubois-Violette, Michel Topics on a noncommutative moment problem. **80g:46056**

Ekhaguere, G. O. S. Markov fields in noncommutative probability theory on W^* algebras. **80b:46110**

Gudder, Stanley P. A Radon-Nikodým theorem for $*$-algebras. **80g:46057**

Haudidier, Dominique Processus non commutatifs dans $A(K)$. (English summary) **80m:46058**

Martikainen, Olli Convolutions of noncommutative analogues of vector measures with applications to operator ideals. **80h:46111**

Muratov, M. A. Noncommutative Orlicz spaces. (Russian) **80k:46074**

Sarymsakov, T. A. (*with* Ajupov, Š. A.) Regularity of Markov chains on O^*-algebras. (Russian) **80h:46112**

Šerstnev, A. N. Measures on the ideals of the orthoprojectors of a von Neumann algebra. (Russian) **80k:46075**

Wilde, Ivan F. *See* **Driessler, Wulf, 80h:46109**

Secondary classifications:

Cook, Thurlow A. The geometry of generalized quantum logics. **(80k:81009)**

Lance, E. Christopher Martingale convergence in von Neumann algebras. **(80d:46115)**

Muratov, M. A. The Luxemburg norm in an Orlicz space of measurable operators. (Russian) **(80i:47061)**

46L55 Noncommutative dynamical systems [See also 28Dxx.]

Batty, C. J. K. Small perturbations of C^*-dynamical systems. **80h:46113**

Bratteli, Ola (*with* Kishimoto, Akitaka; Robinson, Derek W.) Stability properties and the KMS condition. **80c:46068**

Connes, Alain The von Neumann algebra of a foliation. **80i:46057**

Evans, David E. (*with* Takai, Hiroshi) Simplicity of crossed products of GCR algebras by abelian groups. **80m:46059**

Fujita, Masayuki Banach algebra structure in Fourier spaces and generalization of harmonic analysis on locally compact groups. **80j:46106**

Grosu, C. The entropy of a quantum dynamical system. **80k:46076**

Kishimoto, Akitaka (*with* Takai, Hiroshi) Some remarks on C^*-dynamical systems with a compact abelian group. **80k:46077**

Extremal invariant states with a spectrum condition and Borchers' theorem. **80b:46114**

See also **Bratteli, Ola; et al., 80c:46068**

Landstad, Magnus B. Duality theory for covariant systems. **80j:46107**

Longo, Roberto Notes on algebraic invariants for noncommutative dynamical systems. **80j:46108**

Olesen, Dorte On the Connes spectrum of simple C^*-dynamical systems. **80b:46080**

(*with* Pedersen, Gert Kjaergård) Some C^*-dynamical systems with a single KMS state. **80a:46041**

Pedersen, Gert Kjaergård *See* **Olesen, Dorte, 80a:46041**

Pham Phu Hien Sur un sous-espace vectoriel de points quasi-réguliers relatifs à un système dynamique défini sur un espace vectoriel topologique. (English summary) **80k:46078**

Robinson, Derek W. *See* **Bratteli, Ola; et al., 80c:46068**

Samuélidès, Manuel Mesures de Haar et W^*-couple d'un groupoïde mesuré. (English summary) **80k:46079**

Takai, Hiroshi *See* **Kishimoto, Akitaka, 80k:46077** *and* **Evans, David E., 80m:46059**

Yang, J. S. Topological dynamics and algebras with an involution. **80m:46060**

Secondary classifications:

Dupré, Maurice J. Duality for C^*-algebras. **(80a:46034)**

Ganihodžaev, N. N. *See* **Vinokurov, V. G., (80d:28038)**

Hamana, Masamichi Injective envelopes of Banach modules. **(80c:46070)**

Lindblad, Göran Gaussian quantum stochastic processes on the CCR algebra. **(80j:82008)**

Nikanm, Asadollah On one-parameter automorphism groups of tensor products of C^*-algebras and their corresponding generators. **(80b:46071)**

Vinokurov, V. G. (*with* Ganihodžaev, N. N.) Conditional functions in the trajectory theory of dynamical systems. (Russian) **(80d:28038)**

46L60 Applications to physics

Baker, B. M. Free states of the gauge invariant canonical anticommutation relations. **80b:46081**

Gudder, Stanley P. (*with* Marchand, Jean-Paul; Wyss, Walter) Bures distance and relative entropy. **80j:46109**

Marchand, Jean-Paul *See* **Gudder, Stanley P.; et al., 80j:46109**

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Araki, Huzihiro Operator algebras and statistical mechanics. **(80a:82016)**

Arsen'ev, A. A. The Kubo-Martin-Schwinger states of classical dynamical states with infinite-dimensional phase space. (Russian. English summary) **(80d:70026)**

Bratteli, Ola (*with* Kishimoto, Akitaka; Robinson, Derek W.) Ground states of quantum spin systems. **(80a:82038)**

Carey, A. L. (*with* Hurst, C. A.; Keck, B. W.) Algebraic structure of a linear gauge theory. **(80c:81078)**

(*with* Gaffney, J. M.; Hurst, C. A.) A C^*-algebra formulation of gauge transformations of the second kind for the electromagnetic field. **(80d:81136)**

Chen, Etang Markov processes in quantum lattice systems. **(80f:82028)**

Czelakowski, Janusz On extending of partial Boolean algebras to partial $*$-algebras. **(80c:81009)**

Dadaljan, K. Ju. (*with* Horužiĭ, S. S.) Simplicity of the quasilocal algebra of the system of canonical anticommutation relations with gauge group. (Russian. English summary) **(80c:81047)**

See also **Horuiĭ, S. S., (80h:81074)**

Gaffney, J. M. *See* **Carey, A. L.; et al., (80d:81136)**

Grosu, C. The entropy of a quantum dynamical system. **(80k:46076)**

Horuiĭ, S. S. (*with* Dadaljan, K. Ju.) Algebras of observables in models of quantum field theory with superselection rules. **(80h:81074)**

See also **Dadaljan, K. Ju., (80c:81047)**

Hurst, C. A. *See* **Carey, A. L.; et al., (80c:81078)** *and* **Carey, A. L.; et al., (80d:81136)**

Israel, Robert B. ★Convexity in the theory of lattice gases. **(80i:82002)**

Kadison, Richard V. Product isometries and automorphisms of the CAR algebra. **(80i:81031)**

Kastler, Daniel Algebraic features of equilibrium states. **(80k:82024)**

Foundations of equilibrium quantum statistical mechanics. **(80f:82018)**

Keck, B. W. *See* **Carey, A. L.; et al., (80c:81078)**

Kishimoto, Akitaka Variational principle for quasilocal algebras over the lattice. **(80h:82037)**

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Melsheimer, Olaf On the classical content of many-body quantum mechanics. **(80c:82009)**

Narnhofer, Heide Time evolution in equilibrium states without time automorphism. **(80f:82021)**

Pusz, W. Why the KMS states? **(80b:82036)**

Robinson, Derek W. *See* **Bratteli, Ola; et al., (80a:82038)**

Sewell, Geoffrey L. Stability, equilibrium and metastability in statistical mechanics. **(80m:82015)**

Streater, R. F. Spontaneously broken symmetry. **(80d:81126)**

Szabo, N. Paramagnons and magnons of the quantum Heisenberg model and the modular Hilbert algebras. **(80d:82055)**

(Wightman, Arthur S.) *See* **Israel, Robert B., (80i:82002)**

46L99 None of the above, but in this section

Béllissard, Jean (*with* Iochum, Bruno) Homogeneous self-dual cones, versus Jordan algebras. The theory revisited. (French summary) **80b:46082**

Hudson, R. L. Translation-invariant traces and Fourier analysis of multiplier representation of vector groups. **80d:46120**

Iochum, Bruno *See* **Béllissard, Jean, 80b:46082**

Paulsen, Vern Continuous canonical forms for matrices under unitary equivalence. **80j:46110**

Timmermann, B. The uniform and the strong topology on realizations of the algebra of polynomials. **80m:46061**

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Delorme, P. Irreductibilité de certaines représentations de $G^{(X)}$. **(80a:22022)**

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de la Harpe, Pierre Simplicity of the projective unitary groups defined by simple factors. **(80h:22023)**

Hofmann, Karl Heinrich (*with* Lawson, Jimmie D.) The spectral theory of distributive continuous lattices. **(80c:54045)**

Lawson, Jimmie D. *See* **Hofmann, Karl Heinrich, (80c:54045)**

Panov, A. N. The structure of the group C^*-algebra of a Euclidean motion group. (Russian. English summary) **(80a:22008)**

Raeburn, Iain K-theory and K-homology relative to a Π_∞-factor. **(80a:55005)**

Schwartz, Jean-Marie *See* **De Cannière, Jean; et al., (80k:43009)**

Szymański, Wacław Erratum to: "Antisymmetry and contractive representations of function algebras" [Proc. Amer. Math. Soc. **72** (1978), no. 2, 319–326; MR 80a:46028]. **(80k:46059)**

Vuza, Dan A generalisation of Ghika rings. (Romanian. French summary) **(80k:46053)**

46Mxx Categorical methods [See also 18–XX.]

46M05 Tensor products

Hollstein, Ralf Tensorprodukte von stetigen linearen Abbildungen in (F)- und (DCF)-Räumen. **80d:46121**

Kaijser, Sten Some results in the metric theory of tensor products. **80c:46069**

Kaushik, Vimla Projective and inductive limits of m-convex algebras and tensor products of topological algebras. **80h:46115**

Köthe, Gottfried Bounded and compact subsets of ε-tensor products of locally convex spaces. **80d:46122**

Mantero, Anna Maria (*with* Tonge, Andrew) Some remarks on the injective tensor product and Banach algebras. (Italian summary) **80d:46123**

Ochs, Wilhelm When does a projective system of state operators have a projective limit? **80g:46058**

Tiță, Nicolae Certain locally convex topologies on tensor product spaces. (Romanian. French summary) **80j:46111**
Tonge, Andrew *See* **Mantero, Anna Maria, 80d:46123**
Taltsas, Leonidas On the semireflexivity of biprojective tensor product spaces. **80f:46061**

Secondary classifications:

Abel, M. Tensor products of spaces of vector-valued functions. (Russian. Estonian and English summaries) **80k:46039)**
Ceaușescu, Zoia (*with* Vasilescu, Florian-Horia) Tensor products and the joint spectrum in Hilbert spaces. **(80b:47003)**
John, K. (*with* Zizler, V.) On a tensor product characterization of nuclearity. **(80f:46005)**
Lai, Hang Ch'ing (*with* Yeh, Fang Bo) Numerical ranges of the tensor products of elements. **(80f:46050)**
Michor, Peter W. ★Functors and categories of Banach spaces. **(80h:46116)**
Paques, Otilia T. Wiermann Tensor products of Silva-holomorphic functions. **(80g:46043)**
Ščvčik, V. V. Equations of convolution type in a scale of spaces of generalized functions. (Russian) **(80k:46045)**
Vasilescu, Florian-Horia *See* **Ceaușescu, Zoia, (80b:47003)**
Yeh, Fang Bo *See* **Lai, Hang Ch'ing, (80f:46050)**
Zizler, V. *See* **John, K., (80f:46005)**

46M10 Projective and injective objects

Hamana, Masamichi Injective envelopes of Banach modules. **80c:46070**

Secondary classifications:

Ceaușescu, Zoia (*with* Vasilescu, Florian-Horia) Tensor products and Taylor's joint spectrum. **(80a:47004)**
Inoue, Atsushi L^p-spaces and maximal unbounded Hilbert algebras. **(80f:46048)**
Koldunov, A. V. Generators and cogenerators in categories of internally normal vector lattices. (Russian) **(80f:18011)**
Vasilescu, Florian-Horia *See* **Ceaușescu, Zoia, (80a:47004)**

46M15 Functors

Balvalov, A. V. Additions to the article: "The duality of functors that are generated by spaces of vector-valued functions" (Izv. Akad. Nauk SSSR Ser. Mat. **39** (1975), no. 6, 1284–1309). (Russian) **80c:46071**
Cigler, Johann (*with* Losert, Viktor; Michor, Peter W.) ★Banach modules and functors on categories of Banach spaces. **80j:46112**
Losert, Viktor *See* **Cigler, Johann; et al., 80j:46112**
Michor, Peter W. ★Functors and categories of Banach spaces. **80h:46116**
See also **Cigler, Johann; et al., 80j:46112**
Pelletier, Joan Wick Dual functors and the Radon-Nikodým property in the category of Banach spaces. **80h:46117**

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Harte, R. E. Berberian-Quigley and the ghost of a spectral mapping theorem. **(80b:47004)**
Lambek, J. (*with* Rattray, B. A.) A general Stone-Gel'fand duality. **(80f:18012)**
Rattray, B. A. *See* **Lambek, J., (80f:18012)**
Soldatov, A. P. A duality category in the theory of Noetherian operators. (Russian) **(80g:47015)**

46M20 Methods of algebraic topology (cohomology, sheaf and bundle theory, etc.) [See also 14F05, 18Fxx, 55Rxx.]

Craw, Ian Commutative abelian Galois extensions of a Banach algebra. **80g:46059**
Moran, William The global dimension of $C(X)$. **80a:46042**
Pimsner, Mihai On the Ext-group of an AF-algebra. II. **80j:46113**

Secondary classifications:

Banaschewski, B. Recovering a space from its Banach sheaves. **(80m:18004)**
Bödigheimer, Carl-Friedrich Splitting the Künneth sequence in K-theory. **(80k:55013)**
Kaminker, Jerome (*with* Schochet, Claude) Analytic equivariant K-homology. **(80f:55006)**
Leiterer, Jürgen Banach coherent analytic Fréchet sheaves. **(80b:32026)**
Loebl, Richard I. (*with* Schochet, Claude) Covariant representations on the Calkin algebra. I. **(80e:22012)**
Mulvey, Christopher J. Banach spaces over a compact space. **(80m:18005)**
Paulsen, Vern Weak compalence invariants for essentially n-normal operators. **(80j:47032)**
Phillips, John (*with* Raeburn, Iain) Automorphisms of C^*-algebras and second Čech cohomology. **(80e:46038)**
Raeburn, Iain K-theory and K-homology relative to a Π_∞-factor. **(80a:55005)**
See also **Phillips, John, (80e:46038)**
Salinas, Norberto Hypoconvexity and essentially n-normal operators. **(80j:47033)**
Schochet, Claude *See* **Loebl, Richard I., (80e:22012)** *and* **Kaminker, Jerome, (80f:55006)**
Selivanov, Ju. V. Projectivity of certain Banach modules and the structure of Banach algebras. (Russian) **(80g:46046)**
Tomiyama, Jun (*with* Yabuta, Kôzô) General short exact sequence theorem for Toeplitz operators of uniform algebras. **(80f:47042)**
Weiss, Gary The Fuglede commutativity theorem modulo the Hilbert-Schmidt class and generating functions for matrix operators. **(80e:47023)**
Yabuta, Kôzô *See* **Tomiyama, Jun, (80f:47042)**

46M35 Abstract interpolation of topological vector spaces

Beauzamy, Bernard ★Espaces d'interpolation réels: topologie et géométrie. **80k:46080**
Some new factorization theorems. **80k:46081**
Bergh, Jöran On the relation between the two complex methods of interpolation. **80f:46062**
Chen, Chang Pao On the intersections and the unions of Banach algebras. **80k:46082**
Cwikel, Michael Complex interpolation spaces, a discrete definition and reiteration. **80h:46118**
Dubinskiĭ, Ju. A. Limits of Banach spaces. Imbedding theorems. Applications to infinite order Sobolev spaces. (Russian) **80k:46083**
Fehér, Franziska Fractional Lipschitz spaces generated by rearrangement-invariant norms. **80c:46072**
Gapaillard, Christiane (*with* Merucci, Claude) Espaces fonctionnels de Banach—méthode discrète d'interpolation. **80g:46060**
Godziewski, Andrzej Interpolation of modular spaces. I. **80i:46058**
Gribanov, Ju. I. (*with* Matevosjan, R. H.) Completion of normed spaces. (Russian) **80e:46041**
Gustavsson, Jan A function parameter in connection with interpolation of Banach spaces. **80d:46124**
Matevosjan, R. H. *See* **Gribanov, Ju. I., 80e:46041**
Merucci, Claude *See* **Gapaillard, Christiane, 80g:46060**
Nikolova, L. I. The complex interpolation method for several spaces. (Russian) **80m:46062**
Peetre, Jaak Two new interpolation methods based on the duality map. **80d:46125**
Pustyl'nik, E. I. Dual Banach pairs. (Russian) **80g:46061**
Ševčik, V. V. Interpolation of certain properties of linear operators. (Russian) **80k:46084**
Zafran, Misha A multilinear interpolation theorem. **80h:46119**
Zobin, N. M. (*with* Zobina, V. G.) Interpolation in spaces that have given symmetries. (Russian) **80j:46114**
Zobina, V. G. *See* **Zobin, N. M., 80j:46114**

Secondary classifications:

Bennett, Colin (*with* Sharpley, Robert C.) Weak-type inequalities in analysis. **(80d:47049)**
(*with* Sharpley, Robert C.) Weak-type inequalities for H^p and BMO. **(80j:46044)**
Bramble, James H. (*with* Scott, L. Ridgway) Simultaneous approximation in scales of Banach spaces. **(80a:65222)**
Dmitriev, V. I. (*with* Kreĭn, S. G.) Interpolation of operators of weak type. (Russian summary) **(80k:46036)**
Fehér, Franziska The K- and J-interpolation methods for rearrangement-invariant Banach spaces and their duality. **(80g:46028)**
Heinig, Hans P. Weighted interpolation in Banach function spaces. **(80k:46041)**
(*with* Vaughan, David) Interpolation on Orlicz spaces involving weights. **(80f:46028b)**
The Marcinkiewicz interpolation theorem extends to weighted spaces. **(80f:46028a)**
Huet, Denise Approximation d'un espace de Banach et perturbations singulières. (English summary) **(80k:47016)**
Krein, S. G. *See* **Dmitriev, V. I., (80k:46036)**
Maligranda, Lech A remark on the Riesz and Calderón-Zygmund theorem. **(80k:46031)**
Mititel, A. A. The interpolation of transformers of weak type in symmetrically normed ideals. (Russian) **(80a:47061)**
Ovčinnikov, V. I. Interpolation orbits of the classes $\mathfrak{S}_p$ in pairs of Hilbert spaces. (Russian) **(80k:47047)**
Peetre, Jaak Two observations on a theorem by Coifman. **(80j:46047)**
Pesenson, I. Z. Interpolation spaces on Lie groups. (Russian) **(80j:22021)**
Scott, L. Ridgway *See* **Bramble, James H., (80a:65222)**
Sharpley, Robert C. *See* **Bennett, Colin, (80d:47049)** *and* **Bennett, Colin, (80j:46044)**
Sparr, Gunnar Interpolation of weighted L_p-spaces. **(80d:46055)**
Torchinsky, Alberto The K-functional for rearrangement invariant spaces. **(80k:46032)**
Triebel, Hans ★Interpolation theory, function spaces, differential operators. **(80i:46032a)**
★Interpolation theory, function spaces, differential operators. **(80i:46032b)**
Vaughan, David *See* **Heinig, Hans P., (80f:46028b)**

46M40 Inductive and projective limits [See also 46A12.]

46M99 None of the above, but in this section

Kutzler, Kurt Minimale Objekte in gewissen Kategorien von Limesvektorräumen. **80d:46126**
Waelbroeck, Lucien Les quotients banachiques. (English summary) **80a:46043**

Secondary classifications:

Batikjan, B. T. Pointwise derivations of second and third order. (Russian. Armenian summary) **(80d:46095)**
Brézis, Haïm (*with* Fraenkel, L. E.) A function with prescribed initial derivatives in different Banach spaces. **(80k:46047)**
Cooper, James Bell ★Saks spaces and applications to functional analysis. **(80k:46030)**
Fraenkel, L. E. *See* **Brézis, Haïm, (80k:46047)**
Fujii, Kazuyuki A representation of complex K-groups by means of a Banach algebra. **(80d:55003)**
Krée, Paul Formes et coformes sur un espace nucléaire complet. (English summary) **(80d:46088)**
Krivine, Jean-Louis Constantes de Grothendieck et fonctions de type positif sur les sphères. **(80c:46026)**
Pavlov, E. A. The operator of Calderón. (Russian. English summary) **(80d:46054)**
Pietsch, Albrecht Recent progress and open problems in the theory of operator ideals. **(80f:47036)**

Soldatov, A. P. On the Noether theory of operators. (Russian) (80g:46044)

46N05 Miscellaneous applications of functional analysis

Pulmannová, Sylvia A remark on the comparison of Mackey and Segal models. (Russian summary) 80k:46085

Secondary classifications:

Aubin, Jean-Pierre Analyse fonctionnelle non linéaire et applications à l'équilibre économique. (80e:90001)
Bailey, T. K. (*with* Schieve, William C.) Complex energy eigenstates in quantum decay models. (Italian and Russian summaries) (80m:81015)
Baskakov, A. G. (*with* Korpaev, K.) Generalized almost periodic solutions of functional equations. (Russian. Turkmen and English summaries) (80a:47019)
Benioff, Paul A note on the Everett interpretation of quantum mechanics. (80a:81063)
Bourgin, D. G. Some problems, conjectures and methods in analysis. (80k:55009)
Brittin, W. E. *See* Sakakura, A. Y.; et al., (80a:81093)
Buchholz, Detlev On the structure of local quantum fields with nontrivial interaction. (80i:81028)
Carey, A. L. (*with* Hurst, C. A.) Applications of an algebraic quantization of the electromagnetic field. (80f:81054)
Carroll, Robert Wayne ★Transmutation and operator differential equations. (80j:35091)
Chaichian, M. (*with* Hayashi, M.; Nelipa, N. F.; Pukhov, A. E.) On the problem of existence of quantum field theory. (80k:81124)
Čilin, V. I. *See* Sarymsakov, T. A., (80k:28010)
Čuciov, I. D. Probability structure of a certain class of *S*-matrix equations in boson theory. (Russian. English summary) (80a:81094)
Dadašjan, K. Ju. *See* Horuži, S. S., (80k:81074)
Eckmann, J.-P. (*with* Epstein, H.) Borel summability of the mass and the *S*-matrix in φ^4 models. (80k:81150)
Ekeland, Ivar Nonconvex minimization problems. (80k:49007)
Epstein, H. *See* Eckmann, J.-P., (80k:81150)
Gawędzki, K. On confinement of fermions in strongly coupled lattice gauge theory. (80a:81069)
Girardeau, M. D. *See* Sakakura, A. Y.; et al., (80a:81093)
Gudder, Stanley P. (*with* Michel, John R.) Embedding quantum logics in Hilbert space. (80m:81012)
Hayashi, M. *See* Chaichian, M.; et al., (80k:81124)
Hegerfeldt, Gerhard C. Mathematische Aspekte der Quantenfeldtheorie. (80e:81047)
Horuži, S. S. (*with* Dadašjan, K. Ju.) Causal independence of free quantum fields. (80k:81074)
Hünlich, Rolf (*with* Naumann, Joachim) On general boundary value problems and duality in linear elasticity. I. (Czech and Russian summaries) (80e:73014)
Hurst, C. A. *See* Carey, A. L., (80f:81054)
Iagolnitzer, Daniel The $u=0$ structure theorem. (80j:81073)
Jacobs, Konrad ★Measure and integral. (80k:28002)
Jeggle, Hansgeorg ★Nichtlineare Funktionalanalysis. (80k:47057)
Korpaev, K. *See* Baskakov, A. G., (80a:47019)
Krée, Paul Méthodes holomorphes et méthodes nucléaires en analyse de dimension infinie et en théorie quantique des champs. (80g:58012)
Méthodes fonctionnelles en théorie des champs. (English summary) (80k:81131)
Krivskiĭ, I. Ju. *See* Lomsadze, Ju. M.; et al., (80b:81010)
(Kurzweil, Jaroslav) *See* Jacobs, Konrad, (80k:28002)
Lew, John S. Some counterexamples in multidimensional scaling. (80a:54053)
Lomsadze, Ju. M. (*with* Krivskiĭ, I. Ju.; Šuba, I. M.) Construction of Wightman's axiomatic scheme for a concentratable field. VIII. Polynomial cluster property of Wightman functions. (Russian. English summary) (80b:81010)
Lücke, W. PCT, spin and statistics, and all that for nonlocal Wightman fields. (80f:81068)
Maksimov, S. I. Self-similar behavior of inclusive formfactors with respect to a generalized scaling variable. (Russian. English summary) (80b:81058)
Michel, John R. *See* Gudder, Stanley P., (80m:81012)
Naumann, Joachim *See* Hünlich, Rolf, (80e:73014)
Nelipa, N. F. *See* Chaichian, M.; et al., (80k:81124)
Nielsen, Holger Bech Tachyons in field theory. Conventional treatment. (80a:81079)
O'Carroll, Michael L. Applications of functional analysis to the spectral analysis and scattering of quantum mechanical systems. (80a:81095)
Opoĭcev, V. I. Generalization of the theory of monotone and concave operators. (Russian) (80i:47074)
Pastur, L. A. *See* Zagrebnov, V. A., (80b:82032)
Pukhov, A. E. *See* Chaichian, M.; et al., (80k:81124)
Sakakura, A. Y. (*with* Brittin, W. E.; Girardeau, M. D.) Bound states, plane waves, and orthogonalization. (80a:81093)
Sarymsakov, T. A. (*with* Čilin, V. I.) Measures on topological Boolean algebras. (80k:28010)
Schieve, William C. *See* Bailey, T. K., (80m:81015)
Srinivas, M. D. Quantum generalization of Kolmogorov entropy. (80a:81030)
Šuba, I. M. *See* Lomsadze, Ju. M.; et al., (80b:81010)
Suško, V. N. Fermization of the $(\sin\phi)_2$-interaction in a box. (Russian. English summary) (80b:81055)
Ward, B. F. L. Strongly coupled fields. II. Interactions of the Yukawa type. (Italian and Russian summaries) (80b:81080)
Zagrebnov, V. A. (*with* Pastur, L. A.) Singular interaction potentials in classical statistical mechanics. (Russian. English summary) (80b:82032)
Zlatev, I. S. Phase-space quasi-distributions in quantum mechanics. III. (Russian summary) (80a:81048)

46P05 Functional analysis over fields other than R or C; non-Archimedean functional analysis [See also 12J25, 32E27.]

Beckenstein, Edward *See* Shell, Niel; et al., 80j:46119 *and* Narici, Lawrence, 80m:46064
Choudhary, B. (*with* Somasundaram, D.) A note on FK-spaces containing Γ. 80m:46063
Diarra, Bertin Algèbres de Hopf ultramétriques complètes. 80b:46083
Escassut, Alain Sur la semi-norme spectrale supérieure des algèbres de Banach ultramétriques. 80d:46127
Fabijańczyk, Andrzej Some remarks on non-Archimedean fields and non-Archimedean linear topological spaces. (Polish and Russian summaries) 80g:46062
Govaerts, W. Bornological spaces of non-Archimedean valued functions with the point-open topology. 80g:46063
Bornological spaces of non-Archimedean valued functions with the compact-open topology. 80j:46115
Higashiyama, Teiko A certain example of non-Archimedean directed ordered vector spaces. 80i:46059
Jain, Daulat R. (*with* Jain, Pawan Kumar) Hahn-Banach theorem for a linear metric space over non-Archimedean fields. (French summary) 80i:46060
(*with* Jain, Pawan Kumar) Proper bases and homeomorphisms in the space of entire functions of several variables over non-Archimedean fields. (Serbo-Croatian summary) 80j:46116
See also Jain, Pawan Kumar, 80j:46117
Jain, Pawan Kumar (*with* Jain, Daulat R.) Locally *K*-convex space of entire functions on $K \times K$ of finite growth. (Serbo-Croatian summary) 80j:46117
See also Jain, Daulat R., 80i:46060 *and* Jain, Daulat R., 80j:46116
Murphy, Gerard J. Commutative non-Archimedean C^*-algebras. 80f:46063
Nanda, Sudarsan Matrix transformations in nonarchimedean spaces. 80g:46064
Narici, Lawrence (*with* Beckenstein, Edward) Banach algebras over valued fields. 80m:46064
See also Shell, Niel; et al., 80j:46119
Natarajan, P. N. (*with* Rangachari, M. S.) Matrix transformations between sequence spaces over non-Archimedean fields. 80j:46118
Oblenu, E. U. On local compactness in non-Archimedean normed linear spaces. 80c:46073
Prolla, João B. Non-Archimedean function spaces. 80d:46128
van der Put, M. Finite-dimensional normed *K*-vectorspaces. 80f:46064
Rangachari, M. S. *See* Natarajan, P. N., 80j:46118
van Rooij, A. Convexity on *p*-adic Banach spaces. 80i:46061
Shell, Niel (*with* Narici, Lawrence; Beckenstein, Edward) Locally compact non-Archimedean spaces. 80j:46119
Somasundaram, D. *See* Choudhary, B., 80m:46063

Secondary classifications:

Amice, Yvette Duals. (80f:12017)
Borole, Aruna On the algebra of entire functions over a non-Archimedean field taking values in a non-Archimedean Banach algebra. (80k:46054)
Dhanapalan, T. R. Matrix transformations between certain spaces of sequences in a non-Archimedean Banach algebra. (80h:40002)
Isobe, Kiro Some notes on order properties in the non-Archimedean Riesz spaces. (80k:46012)
Jain, Daulat R. *See* Jain, Pawan Kumar, (80d:46045) *and* Saxena, R. K., (80i:32009)
Jain, Pawan Kumar (*with* Jain, Daulat R.) Certain classes of linear functionals on the space of entire functions over non-Archimedean fields. (80d:46045)
Kaljužnyĭ, V. N. On the spectral theory of operators in finite-dimensional non-Archimedean normed spaces. (Russian) (80m:47021)
Phillips, Keith Extendibility of convolution operators and convergence of Fourier series on local fields; integral homogeneity of distributions. (80j:43006)
Saxena, R. K. (*with* Jain, Daulat R.) On the space of entire functions of finite growth over non-Archimedean fields. I, II. (80i:32009)
Somasundaram, D. Inclusion theorems on matrix transformations of some sequence spaces over non-Archimedian fields. III. (80d:40004)
Theiss, Michael Bewertete Vektorräume und pseudovollständige Körper. (80k:12036)
Vilk, M. M. Applications of the Šnirel'man integral in non-Archimedean analysis. (Russian) (80d:12015)
Woodcock, C. F. Parseval's formula and *p*-adic interpolation. (80k:12026)
Convolutions on the ring of *p*-adic integers. (80k:12027)

47–XX OPERATOR THEORY

47–01 Elementary exposition, textbooks

Bhatia, Rajendra (*with* Parthasarathy, Kalyanapuram Rangachari) ★Lectures on functional analysis. Part I. 80d:47001
Parthasarathy, Kalyanapuram Rangachari *See* Bhatia, Rajendra, 80d:47001
Przeworska-Rolewicz, Danuta Introduction to algebraic analysis. (Bulgarian) 80k:47001

Secondary classifications:

Antonevič, A. B. (*with* Knjazev, P. N.; Radyno, Ja. V.) ★Задачи и упражнения по функциональному анализу. (Russian) [Problems and exercises in functional analysis] (80f:46001)
DeVito, Carl L. ★Functional analysis. (80d:46001)
(Fleider, Klaus) *See* Ljusternik, L. A.; et al., (80h:46001)
(Gröger, Konrad) *See* Ljusternik, L. A.; et al., (80h:46001)
Knjazev, P. N. *See* Antonevič, A. B.; et al., (80f:46001)
(Krein, S. G.) *See* Antonevič, A. B.; et al., (80f:46001)
Ljusternik, L. A. (*with* Sobolev, V. I.) ★Elemente der Funktionalanalysis. (80h:46001)

Radyno, Ja. V. *See* **Antonevič, A. B.; et al., (80f:46001)**
Sobolev, V. I. *See* **Ljusternik, L. A., (80h:46001)**
Stakgold, Ivar ★Green's functions and boundary value problems. **(80k:35002)**

47–02 Advanced exposition (research surveys, monographs, etc.)

Tasche, Manfred Funktionalanalytische Methoden in der Operatorenrechnung. **80c:47001**

47–03 Historical (must also be assigned at least one classification number from Section 01)

47–04 Explicit machine computation and programs (not the theory of computation or programming)

47–06 Proceedings, conferences, etc.

(Bachar, John M., Jr.) *See* **Hilbert space operators, 80a:47001**
(Baumgärtel, Hellmut) *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
(Gasymov, M. G.) *See* **Spectral theory of operators, 80j:47003**
(Hadwin, Donald W.) *See* **Hilbert space operators, 80a:47001**
(Kluge, Reinhard) *See* **Theory of nonlinear operators, 80d:47002**
(Ladyženskaja, Olga A.) *See* **Spectral theory of operators, 80j:47003**
(Lassner, Gerd) *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
(Maksudov, F. G.) *See* **Spectral theory of operators, 80j:47003**
(Pietsch, Albrecht) *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
(Ševrin, L. N.) *See* **Studies in functional analysis, 80k:47001**
(Straus, A. V.) *See* **Functional analysis, 80j:47001**
(Uhlmann, A.) *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
(Zabreĭko, P. P.) *See* **Qualitative and approximate methods for the investigation of operator equations, 80g:47002** *and* **Qualitative and approximate methods for the investigation of operator equations, 80j:47002**
All-Union Summer School:
Mathematical *See* **Spectral theory of operators, 80j:47003**
Baku *See* **Spectral theory of operators, 80j:47003**
Berlin *See* **Theory of nonlinear operators, 80d:47002**
Conference:
Hilbert Space Operators *See* **Hilbert space operators, 80a:47001**
Operator Algebras, Ideals, and their Applications in Theoretical Physics *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
Operator Theory Summary of the Proceedings of a Conference on Operator Theory. **80g:47001**
Functional analysis ★Функциональный анализ. Вып. 12. (Russian) [Functional analysis. No. 12] **80j:47001**
See also **Studies in functional analysis, 80k:47001**
Hilbert space operators ★Hilbert space operators. **80a:47001**
Kyoto *See* **Operator theory and its application, 80f:47001**
Leipzig *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
Long Beach, Calif. *See* **Hilbert space operators, 80a:47001**
Nonlinear operators *See* **Theory of nonlinear operators, 80d:47002**
Operator algebras *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
Operator equations *See* **Qualitative and approximate methods for the investigation of operator equations, 80g:47002** *and* **Qualitative and approximate methods for the investigation of operator equations, 80j:47002**
Operator theory *See* **Spectral theory of operators, 80j:47003**
Operator theory and its application ★Operator theory and its application. (Japanese) **80f:47001**
Proceedings:
International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics ★Proceedings of the International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics. **80a:47002**
Qualitative and approximate methods for the investigation of operator equations
★Качественные и приближенные методы исследования операторных уравнений. Вып. 2. (Russian) [Qualitative and approximate methods for the investigation of operator equations. No. 2] **80g:47002**
★Качественные и приближенные методы исследования операторных уравнений. Вып. 3. (Russian) [Qualitative and approximate methods for the investigation of operator equations. No. 3] **80j:47002**
Spectral theory *See* **Functional analysis, 80j:47001**
Spectral theory of operators ★Спектральная теория операторов. (Russian) [Spectral theory of operators] **80j:47003**
Studies in functional analysis ★Исследования по функциональному анализу. (Russian) [Studies in functional analysis] **80k:47001**
Summer School:
Theory of Nonlinear Operators *See* **Theory of nonlinear operators, 80d:47002**
Symposium:
Operator Theory and its Application *See* **Operator theory and its application, 80f:47001**
Theoretical physics *See* **Proceedings: International Conference on Operator Algebras, Ideals, and their Applications in Theoretical Physics, 80a:47002**
Theory of nonlinear operators ★Theory of nonlinear operators. **80d:47002**

Secondary classifications:

(Dimovski, Ivan Hr.) *See* **Generalized functions and operational calculus, (80f:46003)**
(Gamkrelidze, R. V.) *See* **Mathematical analysis, (80d:00011)**
(Knops, R. J.) *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
Algèbres d'opérateurs et leurs applications en physique mathématique ★Algèbres d'opérateurs et leurs applications en physique mathématique. **(80k:46001)**
Colloque:
Algèbres d'Opérateurs et leur Applications en Physique Mathématique *See* **Algèbres d'opérateurs et leurs applications en physique mathématique, (80k:46001)**
Colloques Internationaux du Centre National de la Recherche Scientifique *See* **Algèbres d'opérateurs et leurs applications en physique mathématique, (80k:46001)**
Conference:
Generalized Functions and Operational Calculus *See* **Generalized functions and operational calculus, (80f:46003)**
Edinburgh *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
Generalized functions and operational calculus ★Generalized functions and operational calculus. **(80f:46003)**
Hardy spaces *See* **Linear operators on Hardy spaces, (80g:46003)**
Itogi Nauki i Tehniki *See* **Mathematical analysis, (80d:00011)**
Kyoto *See* **Linear operators on Hardy spaces, (80g:46003)**
Linear operators on Hardy spaces ★Linear operators on Hardy spaces. (Japanese) **(80g:46003)**
Marseille *See* **Algèbres d'opérateurs et leurs applications en physique mathématique, (80k:46001)**
Mathematical analysis ★Математический анализ. Том 16. (Russian) [Mathematical analysis. Vol. 16] **(80d:00011)**
Mechanics *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
Nonlinear analysis and mechanics: Heriot-Watt Symposium ★Nonlinear analysis and mechanics: Heriot-Watt Symposium. Vol. III. **(80d:00015)**
Operational calculus *See* **Generalized functions and operational calculus, (80f:46003)**
Operator algebras *See* **Algèbres d'opérateurs et leurs applications en physique mathématique, (80k:46001)**
Symposium:
Heriot-Watt, Nonlinear Analysis and Mechanics *See* **Nonlinear analysis and mechanics: Heriot-Watt Symposium, (80d:00015)**
Linear Operators on Hardy Spaces *See* **Linear operators on Hardy spaces, (80g:46003)**
Varna *See* **Generalized functions and operational calculus, (80f:46003)**

47Axx Single linear operators: general theory

Secondary classifications:

Babin, A. V. The expression of the solution of the equation $Au = h$ in terms of iterations of an unbounded operator A and weighted approximations of functions. (Russian) **(80k:47029)**
Clafaloni, M. (*with* Onofri, E.) Path integral formulation of reggeon quantum mechanics. **(80b:81109)**
Dowson, H. R. ★Spectral theory of linear operators. **(80c:47022)**
Drummond, I. T. (*with* Shore, G. M.) Conformal anomalies for interacting scalar fields in curved spacetime. **(80d:83043)**
Mukherjee, Rathindra Nath On operators quasisimilar to spectral operators. **(80g:47039)**
Nakonečnyĭ, A. G. A minimax estimate for functionals of the solutions of operator equations. (Russian) **(80b:49020)**
Estimates for functionals of the solutions of differential equations. (Russian) **(80b:49021)**
Onofri, E. *See* **Clafaloni, M., (80b:81109)**
Shore, G. M. *See* **Drummond, I. T., (80d:83043)**

47A05 General (adjoints, conjugates, products, inverses, domains, ranges, etc.)

Allev, B. A. The pseudo-inverse operator for the product of two operators. (Russian) **80h:47002**
Golightly, George Graph-dense linear transformations. **80k:47002**
Hartung, Joachim A note on restricted pseudoinverses. **80j:47004**
Ivanov, S. On holomorphic relative inverses of operator-valued functions. **80c:47002**
Kaufman, William E. Semiclosed operators in Hilbert space. **80j:47005**
Kyle, J. Ranges of Lyapunov transformations for Hilbert space. **80c:47003**
Pekarev, È. L. Convolution on an operator domain. (Russian) **80b:47001**
Przeworska-Rolewicz, Danuta Integration of a unit in linear rings with right invertible operators. **80k:47003**
Rosenbloom, P. C. Commutation relations for linear operators in Hilbert space with applications to partial differential equations. I. **80d:47003**
Tasche, Manfred Some constructions of right inverses and generalized inverses. **80k:47003**
Timmermann, Werner Classification of domains. **80b:47002**
Vinokurov, V. A. Extension of a linear mapping to the completion with the preservation of injectivity. (Russian) **80d:47004**

Secondary classifications:

Colombeau, Jean-François (*with* Perrot, B.) Infinite dimensional holomorphic "normal forms" of operators on the Fock spaces of Boson fields and an extension of the concept of Wick product. **(80d:81061)**
Dijksma, Aalt The generalized Green's function for regular ordinary differential subspaces in $L^2[a, b] \oplus L^2[a, b]$. **(80c:34022)**
Fleming, Richard J. (*with* Jamison, James E.) Commutants of triangular matrix operators. **(80j:47044)**

Groetsch, C. W. (*with* King, J. Thomas) Extrapolation and the method of regularization for generalized inverses. **(80e:65057)**
Hollstein, Ralf Tensorprodukte von stetigen linearen Abbildungen in (F)- und (DCF)-Räumen. **(80d:46121)**
Jamison, James E. *See* **Fleming, Richard J., (80j:47044)**
Kato, Tosio Spectral order and a matrix limit theorem. **(80j:47030)**
King, J. Thomas *See* **Groetsch, C. W., (80e:65057)**
Kroh, Helmut (*with* Mertins, Ulrich) Ein Homomorphiesatz und verwandte Operatoren in topologischen Vektorräumen. (English summary) **(80e:46005)**
Meleško, V. I. Perturbations of unbounded closed pseudoinverse operators. (Russian) **(80m:47010)**
Mertins, Ulrich *See* **Kroh, Helmut, (80e:46005)**
Perrot, B. *See* **Colombeau, Jean-François, (80d:81061)**
Ševčík, V. V. Interpolation of certain properties of linear operators. (Russian) **(80b:46084)**

47A10 Spectrum, resolvent

Aleksandrjan, R. A. (*with* Mkrtčjan, R. Z.) A criterion for the completeness of eigenelements of a selfadjoint operator with a spectrum of infinite multiplicity. (Russian. Armenian and English summaries) **80a:47003**
Allen, G. D. (*with* Ward, Joseph D.) A simultaneous lifting theorem for block diagonal operators. **80f:47002**
Baskakov, A. G. *See* **Ragimov, M. B., 80f:47004**
Bouldin, Richard Essential spectrum for a Banach space operator. **80i:47001**
Cenușescu, Zoia (*with* Vasilescu, Florian-Horia) Tensor products and the joint spectrum in Hilbert spaces. **80b:47003**
(*with* Vasilescu, Florian-Horia) Tensor products and Taylor's joint spectrum. **80a:47004**
Conway, John B. (*with* Morrel, Bernard B.) Operators that are points of spectral continuity. **80b:47004**
Descloux, J. (*with* Nassif, N.; Rappaz, J.) On properties of spectral approximations. **80i:47002**
Feinstein, Aniel The joint spectra of a family of linear operators. (Russian. Azerbaijani and English summaries) **80e:47001**
Harte, R. E. Berberian-Quigley and the ghost of a spectral mapping theorem. **80b:47004**
Herrero, Domingo A. Quasisimilar operators with different spectra. **80e:47002**
Ichinose, Takashi Spectral properties of tensor products of linear operators. I. **80a:47005a**
Spectral properties of tensor products of linear operators. II. The approximate point spectrum and Kato essential spectrum. **80a:47005b**
Iruchi, Keiji The spectral mapping theorem for the Weyl spectrum and Oberai's problems. (Japanese summary) **80f:47003**
Lebedev, A. V. The spectrum of operators decomposable into a direct integral. (Russian. English summary) **80m:47001**
Lomonosov, V. I. Joint approximate spectrum of a commutative family of operators. (Russian) **80j:47006**
Marmeričteĭn, I. I. A property of the spectrum of a family of linear operators and its applications to the study of solutions of difference and operator equations. (Russian) **80k:47004**
Mattila, Kirsti On proper boundary points of the spectrum and complemented eigenspaces. **80i:47003**
Mkrtčjan, R. Z. *See* **Aleksandrjan, R. A., 80a:47003**
Morrel, Bernard B. *See* **Conway, John B., 80b:47004**
Müller-Herrig, Volker Fredholmspektren verbundener Operatoren. **80j:47007**
Nassif, N. *See* **Descloux, J.; et al., 80i:47002**
Nieto, Joseph I. Sur l'abscisse spectrale d'un opérateur et le théorème généralisé de Liapounov. **80a:47006**
Phadke, S. V. (*with* Thakare, Nimbakrishna) Numerical principal and ρ-principal points of an operator. **80b:47005**
Ragimov, M. B. (*with* Baskakov, A. G.) The spectral theory of Taylor and permutable operators in a Banach space and its applications. (Russian. Azerbaijani and English summaries) **80f:47004**
Rai, S. N. Normal approximate spectrum of operators. **80b:47006**
Rappaz, J. *See* **Descloux, J.; et al., 80i:47002**
Rodman, Leiba On existence of common multiples of monic operator polynomials. **80a:47007**
Sen, Dilip Kumar The closure of the numerical range contains the spectrum. **80g:47003**
Tafel, Werner (*with* Voigt, Jürgen; Weidmann, Joachim) The singular sequence problem. **80a:47008**
Takeo, Fukiko On the peripheral spectrum of operators. **80c:47004**
Thakare, Nimbakrishna *See* **Phadke, S. V., 80b:47005**
Vasilescu, Florian-Horia *See* **Cenușescu, Zoia, 80a:47004** *and* **Cenușescu, Zoia, 80b:47003**
Voigt, Jürgen *See* **Tafel, Werner; et al., 80a:47008**
Ward, Joseph D. *See* **Allen, G. D., 80f:47002**
Weidmann, Joachim *See* **Tafel, Werner; et al., 80a:47008**

Secondary classifications:

Albrecht, Ernst On decomposable operators. **(80b:47042)**
Allen, G. D. (*with* Ward, Joseph D.) Hermitian liftings in $B(\ell_p)$. **(80b:47040)**
Bhatia, Rajendra (*with* Mukherjea, Kalyan K.) On the rate of change of spectra of operators. **(80k:15008)**
Brézis, Haïm (*with* Lions, Pierre-Louis) Produits infinis de résolvantes. (English summary) **(80b:47065)**
Dreyfus, Tommy The determinant of the scattering matrix and its relation to the number of eigenvalues. **(80a:47017)**
Erdahl, Robert M. (*with* Grudziński, Hubert) Spectral properties of cones of approximately representable reduced density matrices. **(80d:81020)**
Erdélyi, Ivan The set-spectra of decomposable operators. (Italian summary) **(80m:47029)**
Fialkow, Lawrence A. A note on the operator $X \to AX - XB$. **(80c:47017)**
Grudziński, Hubert *See* **Erdahl, Robert M., (80d:81020)**
Halpern, Herbert Spectra of operator equations and automorphism groups of von Neumann algebras. **(80a:46035)**
Kitover, A. K. The spectrum of automorphisms with weight, and the Kamowitz-Scheinberg theorem. (Russian) **(80f:46053)**
Kosjak, A. V. (*with* Samoĭlenko, Ju. S.) Families of commuting selfadjoint operators. (Russian) **(80m:47023)**
Lions, Pierre-Louis *See* **Brézis, Haïm, (80b:47065)**
Mattila, Kirsti Normal operators and proper boundary points of the spectra of operators on a Banach space. **(80j:47031)**
Mukherjea, Kalyan K. *See* **Bhatia, Rajendra, (80k:15008)**
Nieto, Michael Martin (*with* Simmons, L. M., Jr.) Limiting spectra from confining potentials. **(80d:81012)**
Pták, Vlastimil Perturbations and continuity of the spectrum. **(80g:47016)**
Samoĭlenko, Ju. S. *See* **Kosjak, A. V., (80m:47023)**
Simmons, L. M., Jr. *See* **Nieto, Michael Martin, (80d:81012)**
Vasilescu, Florian-Horia ★Calcul funcțional analitic multidimensional. (Romanian) [Multidimensional analytic functional calculus] **(80i:47027)**
Vu Kuok Fong Quasi-hyponormal operators and operators of class K. (Russian) **(80i:47038)**
Ward, Joseph D. *See* **Allen, G. D., (80b:47040)**
Zajac, Michal Continuity of the spectrum of norm-normal matrices. (Russian summary) **(80d:15029)**
Żelazko, Wiesław An axiomatic approach to joint spectra. I. **(80b:46076)**

47A12 Numerical range

Arora, Pushpa On joint numerical radius. **80d:47005**
Buoni, John J. (*with* Wadhwa, Bhushan L.) On joint numerical ranges. **80e:47003**
Rhodius, Adolf Über zu Halbnormen gehörende numerische Wertebereiche linearer Operatoren. **80i:47004**
Shiu, Elias S. W. Numerical ranges of products and tensor products. **80c:47005**
Wadhwa, Bhushan L. *See* **Buoni, John J., 80e:47003**

Secondary classifications:

Allen, G. D. (*with* Ward, Joseph D.) A simultaneous lifting theorem for block diagonal operators. **(80f:47002)**
Fong, Che Kao (*with* Sourour, A. R.) Renorming, similarity and numerical ranges. **(80i:46040)**
Goldberg, Moshe On certain finite-dimensional numerical ranges and numerical radii. **(80h:15014)**
Isaev, G. A. *See* **Vagabov, N. G., (80e:47017)**
Lai, Hang Ch'ing (*with* Yeh, Fang Bo) Numerical ranges of the tensor products of elements. **(80f:46050)**
Sourour, A. R. *See* **Fong, Che Kao, (80i:46040)**
Vagabov, N. G. (*with* Isaev, G. A.) Distribution of the roots of quadratic forms, spectra and multicompleteness of root vectors of operator functions in Banach space. (Russian. Azerbaijani and English summaries) **(80e:47017)**
Ward, Joseph D. *See* **Allen, G. D., (80f:47002)**
Yeh, Fang Bo *See* **Lai, Hang Ch'ing, (80f:46050)**

47A15 Invariant subspaces

Agler, Jim An invariant subspace theorem. **80e:47004**
Apostol, Constantin Ultraweakly closed operator algebras. **80k:47005**
Berger, Charles A. Sufficiently high powers of hyponormal operators have rationally invariant subspaces. **80c:47006**
Brown, Scott W. Some invariant subspaces for subnormal operators. **80c:47007**
Connections between an operator and a compact operator that yield hyperinvariant subspaces. **80h:47005**
(*with* Chevreau, B.; Pearcy, Carl) Contractions with rich spectrum have invariant subspaces. **80m:47002**
Campbell, Stephen L. (*with* Faulkner, Gary D.; Gardner, Marianne L.) Isometries on L^p spaces and copies of l^p shifts. **80i:47005**
Chevreau, B. *See* **Brown, Scott W.; et al., 80m:47002**
Daughtry, John The inaccessible invariant subspaces of certain C_0 operators. **80k:47006**
Faulkner, Gary D. *See* **Campbell, Stephen L.; et al., 80i:47005**
Fillmore, P. A. A note on reductive operators. **80c:47008**
Fong, Che Kao (*with* Nordgren, Eric A.; Radjabalipour, Mehdi; Radjavi, Heydar; Rosenthal, Peter) Extensions of Lomonosov's invariant subspace theorem. **80h:47006**
Gardner, Marianne L. *See* **Campbell, Stephen L.; et al., 80i:47005**
Gilfeather, Frank Reductive operators with certain spectral separation properties. **80i:47006**
Hoffman, Michael J. Spans and intersections of essentially reducing subspaces. **80a:47009**
See also **Shields, Allen L., 80i:47007**
Jafarian, Ali A. Algebras intertwining normal and decomposable operators. **80k:47007**
(*with* Radjabalipour, Mehdi) Transitive algebra problem and local resolvent techniques. **80m:47003**
Kaluins, Daniel Sous-espace hyperinvariant d'un opérateur compact. (English summary) **80h:47007**
Mertins, Ulrich Eigenschaften stetiger Endomorphismen, die mit beschränkten kommutieren. **80a:47010**
Das Lomonosov-Lemma für topologische Vektorräume. **80b:47007**
Nordgren, Eric A. *See* **Fong, Che Kao; et al., 80h:47006**
Pearcy, Carl *See* **Brown, Scott W.; et al., 80m:47002**
Radjabalipour, Mehdi *See* **Fong, Che Kao; et al., 80h:47006** *and* **Jafarian, Ali A., 80a:47003**

Radjavi, Heydar *See* **Fong, Che Kao; et al., 80h:47006**
Rosenthal, Peter *See* **Fong, Che Kao; et al., 80h:47006**
Shields, Allen L. Some problems in operator theory. **80f:47007**
Teodorescu, Radu I. Factorisations régulières et sous-espaces hyperinvariants. **80a:47011**
Sur l'unicité de la décomposition des contractions en somme directe. **80e:47005**
Thomas, M. P. Invariant complements to closed invariant subspaces. **80c:47009**
Wu, Pei Yuan The hyperinvariant subspace lattice of a contraction of class $C_{\cdot 0}$. **80e:47006**
Erratum: "Hyperinvariant subspaces of the direct sum of certain contractions" [Indiana Univ. Math. J. 27 (1978), no. 2, 267–274; MR 58 #12444]. **80k:47008**
Bi-invariant subspaces of weak contractions. **80k:47009**
C_{11} contractions are reflexive. **80k:47010**
Zsidó, László Invariant subspaces of compact perturbations of linear operators in Banach spaces. **80f:47008**

Secondary classifications:

Bacalu, Ioan Conditions for decomposability of an operator. (Romanian. English summary) **(80a:47047)**
Ball, Joseph A. Factorization and model theory for contraction operators with unitary part. **(80d:47013)**
Erdélyi, Ivan (*with* Lange, Ridgley) Operators with spectral decomposition properties. **(80d:47058)**
Gevorkjan, L. Z. A functional model and invariant subspaces of a class of strictly cyclic operators. (Russian. Armenian and English summaries) **(80j:47029)**
Hadwin, Donald W. (*with* Nordgren, Eric A.; Radjavi, Heydar; Rosenthal, Peter) Most similarity orbits are strongly dense. **(80i:47029)**
Jakobsen, Hans Plesner Intertwining differential operators for $\mathrm{Mp}(n, \mathbf{R})$ and $\mathrm{SU}(n, n)$. **(80f:22009)**
Kim, H. W. (*with* Pearcy, Carl) Subnormal operators and hyperinvariant subspaces. **(80g:47028)**
Landsberg, Max (*with* Pech, Gunter) Hyperinvariante konvexe Teilmengen vollstetiger Abbildungen in topologischen Vektorräumen. **(80j:46008)**
Lange, Ridgley *See* **Erdélyi, Ivan, (80d:47058)**
Lautzenheiser, R. G. Spectral theory for subnormal operators. **(80h:47029)**
Longstaff, W. E. On the operation Alg Lat in finite dimensions. **(80g:47045)**
Nordgren, Eric A. *See* **Hadwin, Donald W.; et al., (80i:47029)**
Pearcy, Carl *See* **Kim, H. W., (80g:47028)**
Pech, Gunter *See* **Landsberg, Max, (80j:46008)**
Pelegrad, Costel Invariant subspaces of von Neumann algebras. II. **(80d:47070)**
Pethe, P. V. (*with* Thakare, Nimbakrishna) Applications of Riesz representation theorem in semi-inner product spaces. **(80d:46042)**
Pol-Świrszcz, Anna Certain reflexive lattices of subspaces of a Hilbert space. **(80g:47049)**
Radjabalipour, Mehdi Decomposable operators. **(80d:47059)**
Radjavi, Heydar *See* **Hadwin, Donald W.; et al., (80i:47029)**
Rosenthal, Peter *See* **Hadwin, Donald W.; et al., (80i:47029)**
Thakare, Nimbakrishna *See* **Pethe, P. V., (80d:46042)**
Vasjunin, V. I. Unconditionally convergent spectral decompositions and interpolation problems. (Russian) **(80b:47041)**
Wogen, Warren R. Quasinormal operators are reflexive. **(80h:47030)**
Wu, Pei Yuan Hyperinvariant subspaces of weak contractions. **(80j:47014)**

47A20 Dilations, extensions, compressions

Masani, P. Propagators and dilations. **80g:47004**
Szafraniec, F. H. Apropos of Professor Masani's talk. **80g:47005**
Note on a general dilation theorem. **80h:47008**

Secondary classifications:

Daugherty, John The inaccessible invariant subspaces of certain C_0 operators. **(80h:47006)**
Górniak, Janusz An analogue of Sz.-Nagy's dilation theorem. II. (Russian summary) **(80j:47053)**
Howland, James S. Dilations and Mehler's kernel. **(80i:81005)**
Mlak, W. Dissipative random processes. **(80g:60032)**
Utkin, V. I. On the theory of extensions and generalized resolvents of symmetric, dissipative and accumulative relations in Hilbert space with a regular G-metric. (Russian) **(80i:47050)**

47A25 Spectral sets

Torgašev, Aleksandar Concept of the spectral sets in Wachs spaces. I. Definitions and basic properties. **80b:47008**

47A30 Norms (inequalities, more than one norm, etc.)

Dostál, Zdeněk The critical exponent of operators with constrained spectral radius. **80d:47006**
Drury, S. W. A generalization of von Neumann's inequality to the complex ball. **80c:47010**
Fujii, Jun-ichi Arithmetico-geometric mean of operators. **80g:47006**
Milićić, Pavle M. Sur la comparaison des normes d'opérateurs. **80h:47009**
Murtazaev, É. É. The discrete Hille-Yosida-Phillips theorem in locally convex spaces. (Russian) **80b:47009**
Pokrovskiĭ, A. V. The limit norm of a linear operator and its applications. (Russian) **80m:47004**
Protter, M. H. Inequalities for powers of unbounded operators. **80h:47010**

Secondary classifications:

Kaljužnyĭ, V. N. Critical index of contractions in Euclidean space. (Russian) **(80k:15025)**
Koskela, Mauri On norms and maximal vectors of linear operators in Minkowski spaces. **(80d:47028)**
Mantero, Anna Maria (*with* Tonge, Andrew) Banach algebras and von Neumann's inequality. **(80j:46081)**
Partington, J. R. Constants relating a Hermitian operator and its square. **(80b:47029)**
Pták, Vlastimil A maximum problem for matrices. **(80k:15035)**
Tonge, Andrew *See* **Mantero, Anna Maria, (80j:46081)**
Young, N. J. Norms of certain rational functions of a matrix and Schur's criterion for polynomials. **(80d:15021)**
Analytic programmes in matrix algebras. **(80g:15027a)**
Norms of powers of matrices with constrained spectra. **(80g:15027b)**

47A35 Ergodic theory [See also 28Dxx.]

Akcoglu, Mustafa A. (*with* Krengel, Ulrich) A differentiation theorem for additive processes. **80d:47007**
(*with* Krengel, Ulrich) A differentiation theorem in L_p. **80m:47005**
Batty, C. J. K. On some ergodic properties for continuous and affine functions. (French summary) **80e:47007**
Feyel, Denis Théorèmes de convergence presque-sûre. Existence de semi-groupes. **80m:47006**
Flytzanis, Elias On a vector-valued ergodic theorem. **80i:47009**
Fong, Humphrey Ratio and stochastic ergodic theorems for superadditive processes. **80h:47011**
Goldstein, Jerome A. (*with* Sandefur, James T., Jr.) Abstract equipartition of energy theorems. **80d:47008**
Gologan, Radu Nicolae On the ergodic theorem of Ornstein and Brunel for nonpositive operators. **80g:47007**
Hiai, Fumio Weakly mixing properties of semigroups of linear operators. **80a:47012**
Istrăţescu, Vasile I. On the spectral mixing theorem for some classes of Banach spaces and for the numerical contractions on Hilbert spaces. **80d:47009**
Krengel, Ulrich *See* **Akcoglu, Mustafa A., 80d:47007** *and* **Akcoglu, Mustafa A., 80m:47005**
Lin, Michael (*with* Sine, Robert) A spectral condition for strong convergence of Markov operators. **80d:47010**
Sandefur, James T., Jr. *See* **Goldstein, Jerome A., 80d:47008**
Satō, Ryōtarō On abstract mean ergodic theorems. **80a:47013**
Ergodic theory and the approximate solution of simultaneous linear functional equations. **80g:47008**
The Hahn-Banach theorem implies Sine's mean ergodic theorem. **80m:47007**
Sine, Robert *See* **Lin, Michael, 80d:47010**
Taylor, G. C. A topological version of some ergodic theorems. **80a:47014**
de la Torre, Alberto An ergodic theorem for vector valued positive contractions. **80a:47015**
The square function for L_1, L_∞ contractions. **80j:47008**
Watanabe, Hisako A potential operator with respect to a resolvent and ergodic properties. **80b:47010**

Secondary classifications:

Grabowski, Marian A-entropy for spectrally absolutely continuous observables. **(80e:82020)**
Kan, Charn Huen Ergodic properties of Lamperti operators. **(80g:47037)**
Satō, Ryōtarō On local ergodic theorems for positive semigroups. **(80b:47055)**

47A40 Scattering theory [See also 34B25, 35P25, 47Dxx.]

Amrein, Werner O. Algebraic scattering theory. **80f:47005**
(*with* Pearson, D. B.) Commutators of Hilbert-Schmidt type and the scattering cross section. **80i:47010**
Baumgärtel, Hellmut (*with* Demuth, M.; Wollenberg, Manfred) On the equality of resonances (poles of the scattering amplitude) and virtual poles. **80j:47009**
Chandler, Colston Nonrelativistic multichannel quantum scattering theory in a two Hilbert space formulation. **80c:47011**
Combes, J. M. Scattering theory in quantum mechanics and asymptotic completeness. **80a:47016**
Demuth, M. *See* **Baumgärtel, Hellmut; et al., 80j:47009**
Dreyfus, Tommy The determinant of the scattering matrix and its relation to the number of eigenvalues. **80a:47017**
Howland, James S. Scattering theory for Hamiltonians periodic in time. **80e:47008**
Jafaev, D. R. On the theory of multichannel scattering in a pair of spaces. (Russian. English summary) **80a:47018**
Kato, Tosio Monotonicity theorems in scattering theory. **80g:47009**
Kolmanenko, V. D. Scattering theory with different state spaces of perturbed and free system. **80f:47006**
An operator representation for nonclosable quadratic forms, and the scattering problem. (Russian) **80d:47011**
See also **Wollenberg, Manfred, 80c:47014**
Lax, Peter D. (*with* Phillips, Ralph S.) The time delay operator and a related trace formula. **80j:47010**
Livšic, M. S. Commuting nonselfadjoint operators and solutions of systems of partial differential equations generated by them. (Russian. Georgian and English summaries) **80m:47008**
Neidhardt, H. Zwei-Raum-Verallgemeinerung des Theorems von Rosenblum und Kato. **80f:47011**
Obermann, P. (*with* Wollenberg, Manfred) Abel wave operators. II. Wave operators for functions of operators. **80j:47011b**
(*with* Wollenberg, Manfred) Abel wave operators. I. General theory. **80j:47011a**

Pavlov, B. S. A partial scattering matrix, its factorization and analyticity. (Russian) **80c:47009**

Pearson, D. B. *See* **Amrein, Werner O., 80l:47010**

Phillips, Ralph S. *See* **Lax, Peter D., 80j:47010**

Schechter, Martin Another look at scattering theory. **80c:47012**
Completeness of wave operators in two Hilbert spaces. **80c:47012**
The invariance principle. **80c:47013**
Scattering in two Hilbert spaces. **80h:47012**

Sohr, Hermann Über die Existenz von Wellenoperatoren für zeitabhängige Störungen. (English summary) **80d:47012**

Vakulenko, A. F. Unitary regularization for Friedrichs model of a many-particle system. (Russian) **80h:47013**

Wollenberg, Manfred On the inverse problem in the abstract scattering theory. **80j:47012**
(*with* Kolmanenko, V. D.) The structure of wave operators. (Russian) **80c:47014**
See also **Baumgärtel, Hellmut; et al., 80j:47009; Obermann, P., 80j:47011a** *and* **Obermann, P., 80j:47011b**

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Amrein, Werner O. (*with* Pearson, D. B.) A time-dependent approach to the total scattering cross section. **(80j:81064)**

Band, William (*with* Park, James L.) Some fundamental difficulties with quantum mechanical collision theory. **(80f:81095)**

Barchielli, A. Quantum-dynamical semi-groups and nucleon-nucleus scattering. (Italian and Russian summaries) **(80a:81109)**

Bollé, D. (*with* Osborn, T. A.) Time delay in N-body scattering. **(80g:81066)**
See also **Osborn, T. A., (80e:81090)**

Breitenecker, M. (*with* Thirring, Walter) Scattering theory in classical dynamics. **(80h:70021)**

Buchholz, Detlev Quantum field theory of massless particles and scattering theory. **(80g:81039)**

Buslaeva, M. V. An application of scattering theory to a hydrodynamical problem. (Russian) **(80g:76013)**

Cartier, Pierre Spectre de l'équation de Schrödinger, application à la stabilité de la matière (d'après J. Lebowitz, E. Lieb, B. Simon et W. Thirring). **(80g:81062)**

Chadan, K. (*with* Martin, André) Scattering theory and dispersion relations for a class of long-range oscillating potentials. **(80k:81143)**

Curtis, C. F. A generalized phase shift approach to the semiclassical S matrix. **(80g:81067)**

Dadaev, L. A. (*with* Kuliev, V. Ju.) On the theory of scattering in quantum-field systems. (Russian) **(80m:81077)**

Davies, E. Brian Two-channel Hamiltonians and the optical model of nuclear scattering. **(80c:81105)**
(*with* Simon, Barry) Scattering theory for systems with different spatial asymptotics on the left and right. **(80c:81110)**

Deguchi, Kisaburo Electron scattering from atoms within a laser field: Green's function method. **(80j:81094)**

Enss, Volker Asymptotic completeness for quantum-mechanical potential scattering. II. Singular and long-range potentials. **(80k:81144)**
Two-cluster scattering of N charged particles. **(80j:81068)**

Fröhlich, Jürg (*with* Morchio, G.; Strocchi, F.) Charged sectors and scattering states in quantum electrodynamics. **(80g:81091)**

Grabowski, Marian A-entropy for generalized observables. **(80j:81007)**

Hagedorn, George A. A link between scattering resonances and dilation analytic resonances in few body quantum mechanics. **(80f:81093)**
Born series for (2 cluster)→(2 cluster) scattering of two-, three-, and four-particle Schrödinger operators. **(80j:81069)**

Isozaki, Hiroshi On the long-range stationary wave operator. **(80a:35097)**

Jafaev, D. R. The violation of unitarity under scattering by a nonstationary potential. (Russian) **(80f:35100)**

Jensen, Arne (*with* Kato, Tosio) Asymptotic behavior of the scattering phase for exterior domains. **(80g:35098)**

Kako, Takashi Existence and equivalence of two types of long-range modified wave operators. **(80f:35101)**

Kato, Tosio On the Cook-Kuroda criterion in scattering theory. **(80e:81084)**
See also **Jensen, Arne, (80g:35098)**

Kelley, C. T. Operator-valued Chandrasekhar H-functions. **(80h:82041)**

Khosrovshahi, G. B. (*with* Levine, H. A.; Payne, L. E.) On the positive spectrum of Schrödinger operators with long range potentials. **(80l:35053)**

Krée, Paul Kernels and symbols of operators for fermion fields. **(80d:81097)**

Krivoščekov, V. K. Invariant regularizations for supersymmetric gauge theories. (Russian. English summary) **(80a:81076)**

Kuliev, V. Ju. *See* **Dadaev, L. A., (80m:81077)**

Kuroda, S. T. ★An introduction to scattering theory. **(80g:35099)**

Lakaev, S. N. (*with* Minlos, R. A.) On bound states of the cluster operator. (Russian. English summary) **(80j:82007)**

Levine, H. A. *See* **Khosrovshahi, G. B.; et al., (80l:35053)**

Levine, Herbert (*with* Yaffe, Laurence G.) Higher-order instanton effects. **(80d:81076)**

Martin, André *See* **Chadan, K., (80k:81143)**

Minlos, R. A. *See* **Lakaev, S. N., (80j:82007)**

Morchio, G. *See* **Fröhlich, Jürg; et al., (80g:81091)**

Moses, Harry E. Jost solutions and Green's functions for the three-dimensional Schrödinger equation. **(80k:81067)**

Murata, Minoru Rate of decay of local energy and wave operators for symmetric systems. **(80h:35105)**

Nenciu, G. (*with* Rasche, G.; Stihi, M.; Woolcock, W. S.) General solution of multichannel partial-wave dispersion relations. I. Coincident thresholds, pole approximation. **(80f:81096)**

Newton, Roger G. A new representation for quantum mechanics. **(80f:81099)**

Nižnik, L. P. (*with* Tarasov, V. G.) An inverse problem of scattering for a one-velocity transfer equation. (Russian) **(80h:85010)**

O'Carroll, Michael L. Applications of functional analysis to the spectral analysis and scattering of quantum mechanical systems. **(80a:81095)**
On the inverse scattering problem for linear evolution equations. **(80k:35057)**

Osborn, T. A. (*with* Bollé, D.) Integral bounds for N-body total cross sections. **(80e:81090)**
See also **Bollé, D., (80g:81066)**

Park, James L. *See* **Band, William, (80f:81095)**

Pavlov, V. P. Theory of generalized retarded operators. (Russian. English summary) **(80c:81108)**

Payne, L. E. *See* **Khosrovshahi, G. B.; et al., (80l:35053)**

Pearson, D. B. *See* **Amrein, Werner O., (80j:81064)**

Polivanov, M. C. Many-particle scattering amplitudes. **(80e:81087)**

Polyzou, Wayne N. (*with* Redish, Edward F.) Unified connected theory of few-body reaction mechanisms in N-body scattering theory. **(80e:81088)**

Rasche, G. *See* **Nenciu, G.; et al., (80f:81096)**

Rasmussen, W. O. (*with* Salamó, S.) An algebraic approach to Coulomb scattering in N dimensions. **(80d:81102)**

Redish, Edward F. *See* **Polyzou, Wayne N., (80e:81088)**

Reichl, L. E. Microscopic theory of superfluid Fermi systems. I. Binary expansion. **(80e:81107a)**
Microscopic theory of superfluid Fermi systems. II. Application to low density hard sphere system. **(80e:81107b)**

Salamó, S. *See* **Rasmussen, W. O., (80d:81102)**

Šatnil, A. N. *See* **Sokolov, S. N., (80e:81115)**

Schechter, Martin Scattering theory for the Schrödinger operator with potentials not of short range. (Russian summary) **(80c:35078)**

Schmidt, E. J. P. Georg Scattering theory for the Schroedinger equation with a potential almost periodic in time. **(80h:35106)**

Simon, Barry ★Trace ideals and their applications. **(80k:47048)**
See also **Davies, E. Brian, (80c:81110)**

Sinha, Kalyan Relative scattering and time delay in presence of a uniform electric field. **(80g:81068)**

Širokov, Ju. M. Unified formalism for quantum and classical scattering theory. (Russian. English summary) **(80k:81149)**

Sokolov, S. N. (*with* Šatnil', A. N.) Physical equivalence of three forms of relativistic dynamics and addition of interactions in the front and instant forms. (Russian. English summary) **(80e:81115)**

Stihi, M. *See* **Nenciu, G.; et al., (80f:81096)**

Stinchcombe, R. B. Kubo and Zubarev formulations of response theory. **(80e:82021)**

Strocchi, F. *See* **Fröhlich, Jürg; et al., (80g:81091)**

Tarasov, V. G. *See* **Nižnik, L. P., (80h:85010)**

Thacker, H. B. (*with* Wilkinson, David) Inverse scattering transform as an operator method in quantum field theory. **(80l:81054)**

Thirring, Walter *See* **Breitenecker, M., (80h:70021)**

Wilkinson, David *See* **Thacker, H. B., (80l:81054)**

van Winter, Clasine A weighted Hilbert space for multiparticle scattering. **(80g:81069)**

Woolcock, W. S. *See* **Nenciu, G.; et al., (80f:81096)**

Yaffe, Laurence G. *See* **Levine, Herbert, (80d:81076)**

47A45 Canonical models for contractions and nonselfadjoint operators

Bail, Joseph A. Factorization and model theory for contraction operators with unitary part. **80d:47013**
Operators of class C_{00} over multiply-connected domains. **80d:47014**
A lifting theorem for operator models of finite rank on multiply-connected domains. **80l:47013**

Bercovici, H. (*with* Foiaş, Ciprian; Kérchy, L.; Sz.-Nagy, Béla) Compléments à l'étude des opérateurs de classe C_0. IV. **80d:47015**

Brodskiĭ, M. S. Unitary operator colligations and their characteristic functions. (Russian) **80e:47010**

Dazord, Jean The growth of the resolvent of a contraction of class C_0. **80l:47014**

Dubovoĭ, V. K. Open fields that are associated with the Duffin equation for scalar particles. (Russian) **80c:47015**

Foiaş, Ciprian *See* **Bercovici, H.; et al., 80d:47015**

Golinskiĭ, L. B. The isomorphism of two functional models of operators of the class C_0. (Russian) **80j:47013**

Kérchy, L. *See* **Bercovici, H.; et al., 80d:47015**

Livšic, M. S. The inverse problem for the characteristic functions of several commuting operators. **80l:47015**

Müller, Vladimir On Jordan models of C_0-contractions. **80d:47016**

Słociński, Marek A Szegő type property for two doubly commuting contractions. **80h:47014**

Sz.-Nagy, Béla Nevanlinna class functions of operators. **80h:47015**
See also **Bercovici, H.; et al., 80d:47015**

Torgašev, Aleksandar Characteristic matrix functions of Wachs spaces. I. Livšits definition. **80l:47016**

Uchiyama, Mitsuru Quasisimilarity of restricted C_0 contractions. **80k:47011**
Double commutants of C_0 contractions. II. **80b:47011**

Vasjunin, V. I. The construction of the B. Szőkefalvi-Nagy and C. Foiaş functional model. (Russian. English summary) **80d:47017**

Virabjan, G. V. Spectral decomposition of a class of nonselfadjoint operators. (Russian. Armenian summary) **80h:47016**

Wu, Pei Yuan Hyperinvariant subspaces of weak contractions. **80j:47014**

Zolotarev, V. A. Triangular models of systems of noncommuting operators. (Russian) **80j:47015**

Secondary classifications:

Daugherty, John The inaccessible invariant subspaces of certain C_0 operators. **(80k:47006)**

Livšic, M. S. Commuting nonselfadjoint operators and solutions of systems of partial differential equations generated by them. (Russian. Georgian and English summaries) **(80m:47008)**

McEnnis, Brian W. Purely contractive analytic functions and characteristic functions of noncontractions. **(80l:47049)**

Teodorescu, Radu I. Sur la fonction caractéristique d'une contraction. **(80e:47015)**
Sur l'unicité de la décomposition des contractions en somme directe. **(80e:47005)**

47A50 Equations involving linear operators, with vector unknowns

Allev, B. A. Determination of a conditional pseudosolution. (Russian. Tajiki summary) **80l:47017**

Baskakov, A. G. (*with* Korpaev, K.) Generalized almost periodic solutions of functional equations. (Russian. Turkmen and English summaries) **80a:47019**

Berlinkov, V. M. Estimation of the stability of quasisolutions, and the modulus of continuity. (Russian) **80c:47016**

Boglaev, Ju. P. Generalized Frobenius formula in linear, singularly perturbed equations. (Russian) **80j:47016**

Browne, Patrick J. (*with* Sleeman, B. D.) Solvability of a linear operator system. II. **80b:47012**

Bubgeim, A. L. Volterra operator equations in scales of Banach spaces. (Russian) **80k:47012**

Chillingworth, David *See* **King, J. Thomas, 80m:47009**

Danilin, A. R. Stability of finite-dimensional approximations in the generalized method of the residual. (Russian) **80g:47010**

Dezin, A. A. Second-order operator equations. (Russian) **80d:47018**

Domanskiĭ, E. N. On the question of the solvability of a linear operator equation. (Russian) **80l:47018**

Dzhumaev, S. Convergence theorems for equations with noninverse operators. (Russian. Tajiki summary) **80g:47011**

Finkow, Lawrence A. A note on the operator $X \to AX - XB$. **80c:47017**

Golovač, G. P. Solution of the spectral problem for operator equations that depend linearly on an eigenvalue. (Russian. English summary) **80j:47017**

Imomnazarov, B. Regularization of equations of the first kind with an abstract Volterra operator. (Russian) **80l:47019**

Kaljakin, L. A. Variational inequalities with a small parameter. (Russian) **80g:47012**

King, J. Thomas (*with* Chillingworth, David) Approximation of generalized inverses by iterated regularization. **80m:47009**

Korkina, L. F. A correctness class of operator equations of the first kind. (Russian) **80g:47013**

Korpaev, K. *See* **Baskakov, A. G., 80a:47019**

Ludwig, S. Über die Approximation verallgemeinerter Lösungen mit dem Galerkinverfahren. (Russian and Estonian summaries) **80k:47013**

Meleško, V. I. An investigation of stable L-pseudo-inverses of unbounded closed operators by the regularization method. (Russian) **80l:47020**
Perturbations of unbounded closed pseudoinverse operators. (Russian) **80m:47010**

Morozov, V. A. Solution of operator equations of the first kind by the method of finite-rank approximations. (Russian) **80k:47014**

Neuberg, Jiří Universality of the best determined terms method. (Russian and Czech summaries) **80l:47021**

Przeworska-Rolewicz, Danuta On trigonometric identity for right invertible operators. **80a:47020**
A generalization of Wroński theorems. **80a:47021**

Sleeman, B. D. *See* **Browne, Patrick J., 80b:47012**

Steĭenko, V. Ja. Existence criteria for a positive solution of a linear operator equation. (Russian. Tajiki summary) **80l:47022**

Tasche, Manfred On degenerate operator equations. **80m:47011**

Vasin, V. V. Regularization of the problem of calculating the values of an unbounded positive operator. (Russian) **80h:47017**
Discrete convergence and finite-dimensional approximation of regularizing algorithms. (Russian) **80g:47014**

Wachnicki, Eugeniusz On homogeneous linear equations with coefficients in fields algebraically nonclosed. (Russian summary) **80k:47015**

Žamanov, È. The spectrum of a two-parameter pencil. (Russian) **80b:47013**

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Bakušinskiĭ, A. B. Optimal and quasi-optimal methods for the solution of linear problems that are generated by regularizing algorithms. (Russian) **(80d:65068)**

Berg, Lothar General iteration methods for the evaluation of linear equations. **(80k:65034)**

Berlinkov, V. M. A method for obtaining error estimates in the solution of ill-posed problems. (Russian) **(80l:65061)**

Bertero, M. (*with* Viano, G. A.) On probabilistic methods for the solution of improperly posed problems. (Italian summary) **(80f:60057)**

Bondarev, B. V. Method of stochastic approximation of the solution of ill-posed problems. (Russian) **(80k:65051)**

Buche, A. B. The generalized Cauchy equation for self-adjoint operators on a Hilbert space. **(80e:39006)**

Collins, W. D. Dual extremum principles for the heat equation. **(80g:49025)**

Delvos, F.-J. Splines and pseudo-inverses. (French summary) **(80a:65118)**

(Dümmel, Siegfried) *See* **Pröößdorf, Siegfried, (80d:47044)**

Emlin, I. V. (*with* Krasnosel'skiĭ, M. A.) On the theory of ill-posed problems. (Russian) **(80l:65063)**

Fedotov, A. M. Some inequalities for the error of the approximate solutions of operator equations. (Russian) **(80g:65064)**

Friedrich, Volkmar Zur stochastischen Regularisierung nichtkorrekter Gleichungen in Hilberträumen. (English summary) **(80k:65052)**
(*with* Uhlig, Andreas) Zur stochastischen Regularisierung linearer Gleichungen in Hilberträumen. **(80d:65069)**

Gabdulhaev, B. G. Optimization of numerical methods for the solution of linear problems. (Russian) **(80a:65105)**

Goerisch, Friedrich Über Quotienten-Einschliessungssätze bei allgemeinen Eigenwertaufgaben. (English summary) **(80j:65022)**

Groetsch, C. W. On rates of convergence for approximations to the generalized inverse. **(80b:65072)**

Hale, Jack K. Bifurcation from simple eigenvalues for several parameter families. **(80d:47092)**

Hofmann, Bernd Über Quelldarstellungen bei einigen linearen Regularisierungsverfahren. **(80d:65070)**

Imomnazarov, B. Solution of an operator equation of the first kind in abstract spaces. (Russian) **(80b:65073)**

Ivanov, V. K. (*with* Vasin, V. V.; Tanana, V. P.) ★Теория линейных некорректных задач и ее приложения. (Russian) [Theory of linear ill-posed problems and its applications] **(80f:65062)**

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47A67 Representation theory

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47A70 Eigenfunction expansions, rigged Hilbert spaces; eigenvalue problems in general [See also 49Gxx.]

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Kolata, William G. Weakly perturbed forms and the spectral properties of associated eigenvalue problems. **80f:47017**

Krein, M. G. (*with* Langer, Heinz) On some mathematical principles in the linear theory of damped oscillations of continua. I. **80d:47026**

(*with* Langer, Heinz) On some mathematical principles in the linear theory of damped oscillations of continua. II. **80h:47022**

Lakaev, S. N. The discrete spectrum of a generalized Friedrichs model. (Russian) **80b:47023**

Langer, Heinz *See* **Krein, M. G., 80d:47026** *and* **Krein, M. G., 80b:47022**

Linden, Hanjörg The method of orthogonal invariants for quadratic eigenvalue problems. **80k:47021**

Oročko, Ju. B. On the theory of expansions in the generalized eigenfunctions of selfadjoint operators. (Russian) **80a:47031**

Pietsch, Albrecht *s*-numbers and eigenvalues of operators in Banach spaces. (Russian) **80k:47022**

Eigenvalues of integral operators. (Russian) **80k:47023**

Radrigev'skiĭ, G. V. The completeness of part of the root vectors of the operator pencil $L(\lambda)=I-\lambda^{-k}B-\lambda^{n}A$. (Russian) **80m:47016**

Roach, G. F. (*with* Sleeman, B. D.) Coupled operator systems and multiparameter spectral theory. **80d:47027**

(*with* Sleeman, B. D.) On the spectral theory of operator bundles. II. **80b:47024**

Sidorov, N. A. The calculation of eigenvalues and -vectors of linear operators on the basis of the theory of perturbations. (Russian) **80b:47023**

Sleeman, B. D. Multiparameter spectral theory in Hilbert space. **80c:47021**

See also **Roach, G. F., 80d:47027; Roach, G. F., 80b:47024** *and* **Browne, Patrick J., 80j:47024**

(Troelstra, R.) *See* **Krein, M. G.; et al., 80d:47026** *and* **Krein, M. G.; et al., 80b:47022**

Vagabov, N. G. (*with* Isaev, G. A.) Distribution of the roots of quadratic forms, spectra and multicompleteness of root vectors of operator functions in Banach space. (Russian. Azerbaijani and English summaries) **80e:47017**

Vasudeva, H. L. One-dimensional perturbations. **80g:47023**

Vinogradskaja, A. V. *See* **Girko, V. L., 80f:47016**

Virabjan, G. V. The spectrum of a class of selfadjoint quadratic operator pencils. (Russian. Armenian summary) **80e:47018**

Secondary classifications:

Butler, John B., Jr. On the inverse problem for selfadjoint operators defined on certain rigged Hilbert spaces. **(80i:34028)**

Carmona, René Étude probabiliste de l'opérateur de Schrödinger. **(80k:81024)**

Choudhury, M. H. (*with* Pearson, D. B.) The spectral properties of many-electron atomic Hamiltonians and the method of configuration interaction. I. Proof of convergence of the configuration interaction method. **(80c:81016)**

Corinaldesi, E. Collective co-ordinate of a quantized field. (Italian and Russian summaries) **(80e:81045)**

Dietz, David (*with* Greenberg, William) The conditional entropy in the microcanonical ensemble: the quantum lattice. **(80b:82014)**

Ditkin, V. V. Approximate calculation of the eigenvalues of a polynomial pencil of linear operators. (Russian) **(80a:65104)**

Friedland, Shmuel Extremal eigenvalue problems. **(80e:49031)**

Friedrich, M. (*with* Lassner, Gerd) Angereicherte Hilberträume, die zu Operatorenalgebren assoziiert sind. **(80f:47037)**

Gohberg, Israel (*with* Lancaster, Peter; Rodman, Leiba) On selfadjoint matrix polynomials. **(80k:15018)**

Greenberg, William *See* **Dietz, David, (80b:82014)**

Guseinov, G. Š. The determination of the infinite Jacobi matrix from two spectra. (Russian) **(80g:47033)**

Johnson, W. B. (*with* König, Hermann; Maurey, Bernard; Retherford, J. R.) Eigenvalues of p-summing and l_p-type operators in Banach spaces. **(80b:47028)**

(*with* König, Hermann; Maurey, Bernard; Retherford, J. R.) Eigenvalues of p-summing and l_p-type operators in Banach spaces. **(80f:47033)**

Kamenskiĭ, A. G. Eigenvalues and root-vectors of some differential-difference operators. (Russian) **(80m:47028)**

Kolomý, Josef Some methods for finding of eigenvalues and eigenvectors of linear and nonlinear operators. **(80i:49037)**

König, Hermann *See* **Johnson, W. B.; et al., (80b:47028)** *and* **Johnson, W. B.; et al., (80f:47033)**

Kostjučenko, A. G. (*with* Škalikov, A. A.) Summability of expansions in eigenfunctions of differential operators and of convolution operators. (Russian) **(80d:34017)**

Lancaster, Peter *See* **Gohberg, Israel; et al., (80k:15018)**

Larsen, Edward W. The spectrum of the multigroup neutron transport operator for bounded spatial domains. **(80i:82036)**

Lassner, Gerd *See* **Friedrich, M., (80f:47037)**

Lemmon, Reinard The method of false perturbations for nonlinear eigenvalue problems. (Russian) **(80b:65075)**

Lenard, A. Thermodynamic proof of the Gibbs formula for elementary quantum systems. **(80g:82013)**

Mamedov, K. Š. The completeness of root vector functions of a general boundary value problem for an operator-differential equation, and the application to irregular boundary value problems for partial differential equations. (Russian. Azerbaijani and English summaries) **(80e:34042)**

Maurey, Bernard *See* **Johnson, W. B.; et al., (80b:47028)** *and* **Johnson, W. B.; et al., (80f:47033)**

Mihailec, V. A. Selfadjoint extensions of operators with a prescribed spectrum asymptotics. (Russian. English summary) **(80d:47038)**

Pearson, D. B. *See* **Choudhury, M. H., (80c:81016)**

Ramm, A. G. Perturbations preserving asymptotics of spectrum. (Italian summary) **(80e:47012)**

Retherford, J. R. *See* **Johnson, W. B.; et al., (80b:47028)** *and* **Johnson, W. B.; et al., (80f:47033)**

Rodman, Leiba *See* **Gohberg, Israel; et al., (80k:15018)**

Škalikov, A. A. *See* **Kostjučenko, A. G., (80d:34017)**

Zelenko, L. B. Asymptotic distribution of eigenvalues in a gap in the continuous spectrum of a multidimensional Schrödinger operator with perturbed periodic potential. (Russian) **(80g:35096)**

47A99 None of the above, but in this section

Berg, I. D. On norm approximation of functions of operators in the Calkin algebra. **80j:47025**

Davis, Chandler Matrix-valued shell of an operator or relation. **80a:47032**

Dickmeis, W. (*with* Nessel, R. J.) On Banach-Steinhaus theorems with orders. **80k:47024**

Golič̆ev, I. I. Approximation of an element in the range of a function of an operator. (Russian) **80b:47024**

Koskela, Mauri On norms and maximal vectors of linear operators in Minkowski spaces. **80d:47028**

Krasnosel'skiĭ, M. A. The rotation of subspaces. (Russian) **80a:47033**

Nessel, R. J. *See* **Dickmeis, W., 80k:47024**

Pruski, S. Superpositions of expansions and contractions and the p-reducibility of fermion operators. **80m:47017**

Ramm, A. G. Necessary and sufficient conditions for realizability of the principle of limiting amplitude. (Russian) **80b:47025**

Secondary classifications:

Alimov, A. L. (*with* Damaskinskiĭ, E. V.) A selfadjoint phase operator. (Russian. English summary) **(80h:81016)**

Arlinskiĭ, Ju. M. (*with* Derkač, V. A.) The inverse problem of the theory of characteristic operator-functions of unbounded operator colligations in the space Π_κ. (Russian) **(80h:47044)**

Becher, P. On the vacuum structure of the Schwinger model. (Italian and Russian summaries) **(80c:81076)**

Berberian, S. K. Produit de convolution des mesures opératorielles. **(80d:28021)**

Damaskinskiĭ, E. V. *See* **Alimov, A. L., (80h:81016)**

Derkač, V. A. *See* **Arlinskiĭ, Ju. M., (80h:47044)**

Engl, Heinz W. (*with* Nashed, M. Z.) Stochastic projectional schemes for random linear operator equations of the first and second kinds. **(80m:60073)**

Feintuch, Avraham Causality and strict causality for symmetric bilinear systems. **(80b:93052)**

Frishman, Y. Nonabelian gauge theory in two dimensions. **(80b:81107)**

Kern, Eberhard Die Pauli-Gleichung mit Differentialoperatoren für den Spin. (English summary) **(80a:81017)**

Lelterer, Jürgen Banach coherence and Oka's principle. **(80c:32010)**

Misuno, O. The Q-mappings and the reduction of n-particle problems. **(80a:81026)**

Mlak, W. Szegő measures related to compact plane sets. **(80b:46068)**

Nashed, M. Z. *See* **Engl, Heinz W., (80m:60073)**

Primas, H. *See* **Saraswati, Dipak K., (80b:82018a)** *and* **Saraswati, Dipak K., (80b:82018b)**

Saraswati, Dipak K. (*with* Primas, H.) A system theoretic representation of mechanical systems. I. Decomposition of a mechanical system into a hierarchy of orthogonal stationary linear dynamical systems. **(80b:82018a)**

(*with* Primas, H.) A system theoretic representation of mechanical systems. II. Stochastic interpretation. **(80b:82018b)**

Schmidt, F. Banach-space-valued stationary processes with absolutely continuous spectral function. **(80f:60036)**

Seeberg, O. On the derivation of entropy conserving equations for commuting macroobservables. **(80d:82033)**

47Bxx Single linear operators: special classes of operators

Dowson, H. R. ★Spectral theory of linear operators. **80c:47022**

Secondary classifications:

Girko, V. L. (*with* Vinogradskaja, A. V.) The control of the spectrum of linear operators in Hilbert space. (Russian. English summary) **(80f:47016)**

Nandts, J. (*with* Pulè, J. V.; Verbeure, André) Linear response and relaxation in quantum lattice systems. **(80k:82026)**

Pulè, J. V. *See* **Nandts, J.; et al., (80k:82026)**

Verbeure, André *See* **Nandts, J.; et al., (80k:82026)**

Vinogradskaja, A. V. *See* **Girko, V. L., (80f:47016)**

47B05 Compact operators, Riesz operators

Barría, José (*with* Herrero, Domingo A.) Closure of similarity orbits of nilpotent operators. I. Finite rank operators. **80f:47018**

Deckard, D. (*with* Foiaş, Ciprian; Pearcy, Carl) Compact operators with root vectors that span. **80m:47018**

Deshpande, M. V. (*with* Padhye, S. M.) Characterizations of collectively precompact and semiprecompact operators on topological vector spaces. **80m:47019**

Drewnowski, Lech On minimal topological linear spaces and strictly singular operators. **80k:47025**

Fakhoury, Hicham Approximation des bornés d'un espace Banach par des compacts et applications à l'approximation des opérateurs bornés. (English summary) **80g:47024**

Foiaş, Ciprian *See* **Deckard, D.; et al., 80m:47018**

Herrero, Domingo A. The Volterra operator is a compact universal quasinilpotent. **80b:47026**

See also **Barría, José, 80f:47018**

Kalton, Nigel Compact operators on symmetric function spaces. (Russian summary) **80d:47029**

Moszyński, Krzysztof (*with* Pokrzywa, Andrzej) Some remarks on spectral approximation for compact operators. (Polish) **80d:47030**

Padhye, S. M. *See* **Deshpande, M. V., 80m:47019**

Pearcy, Carl *See* **Deckard, D.; et al., 80m:47018**

Pietsch, Albrecht Inessential operators in Banach spaces. **80c:47023**

Pokrzywa, Andrzej *See* **Moszyński, Krzysztof, 80d:47030**

Tacon, D. G. Two characterizations of power compact operators. **80d:47031**

Wrobel, Volker Streng singuläre Operatoren in lokalkonvexen Räumen. **80f:47031**

Secondary classifications:

Abatzoglou, Theagenis J. Norm derivatives on spaces of operators. **(80d:47067)**
Brilloüet, Nicole Opérateurs extrémaux dans la boule unité de $L(E, \mathcal{C}(Y))$. (English summary) **(80i:47060)**
Fakhoury, Hicham Approximation des bornés d'un espace de Banach par des compacts et applications. **(80a:47063)**
Quelques propriétés de l'espace des opérateurs compacts. **(80k:47045)**
Feintuch, Avraham Strictly and strongly strictly causal linear operators. **(80c:93022)**
Hennefeld, Julien Smooth, compact operators. **(80k:46021)**
Herrero, Domingo A. Almost every quasinilpotent Hilbert space operator is a universal quasinilpotent. **(80a:47026)**
Hilsum, Michel Sur les sous-espaces spectraux d'un opérateur compact relativement à une algèbre de von Neumann. (English summary) **(80k:46102)**
Kamowitz, Herbert Compact operators of the form uC_φ. **(80f:47027)**
Lima, Åsvald Intersection properties of balls in spaces of compact operators. **(80g:47048)**
Shapiro, Harold S. Stefan Bergman's theory of doubly-orthogonal functions. An operator-theoretic approach. **(80m:30010)**
Smith, R. R. (*with* Ward, Joseph D.) M-ideals in $B(l_p)$. **(80j:47058)**
Sobolev, A. V. Abstract oscillation operators. (Russian) **(80m:47027)**
Ward, Joseph D. *See* **Smith, R. R., (80j:47058)**

47B10 Hilbert-Schmidt operators, trace class operators, nuclear operators, p-summing operators, etc.

Adamjan, V. M. (*with* Pavlov, B. S.) Trace formula for dissipative operators. (Russian. English summary) **80h:47026**
Carl, B. (*with* Pietsch, Albrecht) Some contributions to the theory of s-numbers. **80g:47025**
(*with* Maurey, Bernard; Puhl, J.) Grenzordnungen von absolut-(r, p)-summierenden Operatoren. **80f:47032**
Gluskin, E. D. Estimates of the norms of certain p-absolutely summing operators. (Russian) **80g:47026**
Grobler, Jacobus J. A note on majorizing and cone absolutely summing operators in Banach lattices. **80b:47027**
Johnson, W. B. (*with* König, Hermann; Maurey, Bernard; Retherford, J. R.) Eigenvalues of p-summing and l_p-type operators in Banach spaces. **80b:47028**
(*with* König, Hermann; Maurey, Bernard; Retherford, J. R.) Eigenvalues of p-summing and l_p-type operators in Banach spaces. **80f:47033**
Komarčev, I. A. Absolutely 2-summable operators in some Banach spaces. (Russian) **80i:47034**
König, Hermann Eigenvalues of p-nuclear operators. **80h:47025**
See also **Johnson, W. B.; et al., 80b:47028** *and* **Johnson, W. B.; et al., 80f:47033**
Linde, Werner Gaussian measures on Banach spaces. **80d:47032**
Litvinov, G. L. Traces of linear operators in locally convex spaces. (Russian) **80h:47026**
Maeda, Michie A remark on the p-radonifying maps. **80c:47024**
Martín Peinador, Elena Norm properties of operators in relation to the absolute summability of a Hilbert space. (Spanish) **80b:47027**
Maurey, Bernard *See* **Johnson, W. B.; et al., 80b:47028**; **Carl, B.; et al., 80f:47032** *and* **Johnson, W. B.; et al., 80f:47033**
Mukarí, D. H. Some questions of the theory of dual-Radon mappings. (Russian) **80c:47019**
Nakamura, Masatoshi A generalization of absolutely summing operators. **80c:47025**
Oloff, R. Entropieeigenschaften von Diagonaloperatoren. **80f:47035**
Pavlov, B. S. *See* **Adamjan, V. M., 80h:47026**
Pietsch, Albrecht *See* **Carl, B., 80g:47025**
Pisier, Gilles Topics on Grothendieck's theorem. **80j:47026**
Grothendieck's theorem for noncommutative C^*-algebras, with an appendix on Grothendieck's constants. **80j:47027**
Puhl, J. *See* **Carl, B.; et al., 80f:47032**
Reinov, O. I. Operators of RN type in Banach spaces. (Russian) **80h:47028**
Retherford, J. R. *See* **Johnson, W. B.; et al., 80b:47028** *and* **Johnson, W. B.; et al., 80f:47033**
Samarskiĭ, V. G. (s, μ)-similar operators in Banach spaces. (Russian. English summary) **80d:47033**
Schwarz, Hans-Ulrich A characterization of (p, q)-absolutely summing operators. **80m:47020**
Tiță, Nicolae On a class of l_Φ operators. **80g:47027**
Tonge, Andrew The von Neumann inequality for polynomials in several Hilbert-Schmidt operators. **80d:47034**

Secondary classifications:

Carmona, René (*with* Chevet, Simone) Tensor Gaussian measures on $L^p(E)$. **(80j:60010)**
Chevet, Simone *See* **Carmona, René, (80j:60010)**
Hadjisavvas, N. (*with* Mugur-Schächter, Mioara) Unbounded measures on the closed subspaces of a Hilbert space. **(80f:81012)**
Hollig, Klaus Approximationszahlen von Sobolev-Einbettungen. **(80j:46051)**
Howard, J. Factoring unconditionally converging operators. **(80g:47021)**
Janovskiĭ, L. P. Summing, order summing operators and the characterization of AL-spaces. (Russian) **(80h:46025)**
Martikainen, Olli Convolutions of noncommutative analogues of vector measures with applications to operator ideals. **(80h:46111)**
Meyer-Nieberg, Peter Kegel p-absolutsummierende und p-beschränkende Operatoren. **(80h:47053)**
Mugur-Schächter, Mioara *See* **Hadjisavvas, N., (80f:81012)**
Pietsch, Albrecht Recent progress and open problems in the theory of operator ideals. **(80f:47036)**
Reinov, O. I. Some classes of sets in Banach spaces and the topological characterization of operators of type RN. (Russian. English summary) **(80d:46031)**
Vladimirskiĭ, Ju. N. On conditions for extendibility of a cylindrical measure in a conjugate Banach space to Radon measure. (Russian. English summary) **(80h:28019)**
Zsidó, László Invariant subspaces of compact perturbations of linear operators in Banach spaces. **(80i:47008)**

47B15 Hermitian and normal operators (spectral measures, functional calculus, etc.)

Berezans'kiĭ, Ju. M. Spectral representations of the solutions of certain classes of functional and differential equations. (Russian. English summary) **80a:47034**
Bouldin, Richard Selfadjoint approximants. **80k:47027**
Spectral approximations of a normal operator. **80j:47028**
Fong, Che Kao Normal operators on Banach spaces. **80c:47020**
Gevorkjan, L. Z. A functional model and invariant subspaces of a class of strictly cyclic operators. (Russian. Armenian and English summaries) **80j:47029**
Kaljužnyĭ, V. N. On the spectral theory of operators in finite-dimensional non-Archimedean normed spaces. (Russian) **80m:47021**
Kato, Tosio Spectral order and a matrix limit theorem. **80j:47030**
Koplienko, L. S. Local conditions for the existence of the function of spectral shift. (Russian. English summary) **80a:47035**
Luong Dinh Tin The comparison of spectrum of normalizable matrices. (Russian and Czech summaries) **80a:47036**
Mattila, Kirsti Normal operators and proper boundary points of the spectra of operators on a Banach space. **80j:47031**
Muraz, Gilbert Opérateurs subordonnés à une mesure spectrale. (English summary) **80i:47036**
Partington, J. R. Constants relating a Hermitian operator and its square. **80b:47029**
Paulsen, Vern Weak compalence invariants for essentially n-normal operators. **80j:47032**
Salinas, Norberto A classification problem for essentially n-normal operators. **80e:47021**
Hypoconvexity and essentially n-normal operators. **80j:47033**

Secondary classifications:

Baillet, Michel Analyse spectrale des opérateurs hermitiens d'une espace de Banach. **(80j:46080)**
Ball, Joseph A. Factorization and model theory for contraction operators with unitary part. **(80d:47013)**
Berezans'kiĭ, Ju. M. The expansion in simultaneous generalized eigenvectors of an arbitrary family of commuting normal operators. **(80i:47030)**
Birman, M. Š. (*with* Veršik, A. M.; Solomjak, M. Z.) The product of commuting spectral measures may fail to be countably additive. (Russian) **(80h:28010)**
Mattila, Kirsti On proper boundary points of the spectrum and complemented eigenspaces. **(80i:47003)**
Morley, T. D. Parallel summation, Maxwell's principle and the infimum of projections. **(80g:94075)**
Oročko, Ju. B. On the theory of expansions in the generalized eigenfunctions of selfadjoint operators. (Russian) **(80a:47031)**
Pusz, W. (*with* Woronowicz, S. L.) Form convex functions and the WYDL and other inequalities. **(80j:47019)**
Raboin, Pierre Le problème du $\bar{\partial}$ sur un espace de Hilbert. (English summary) **(80i:32052)**
Sokolov, S. N. Relativistic addition of direct interactions in the point form of dynamics. (Russian. English summary) **(80d:81021)**
Solomjak, M. Z. *See* **Birman, M. Š.; et al., (80h:28010)**
Tafel, Werner (*with* Voigt, Jürgen; Weidmann, Joachim) The singular sequence problem. **(80a:47008)**
Veršik, A. M. *See* **Birman, M. Š.; et al., (80h:28010)**
Voiculescu, Dan Some results on norm-ideal perturbations of Hilbert space operators. **(80m:47012)**
Voigt, Jürgen *See* **Tafel, Werner; et al., (80a:47008)**
Weidmann, Joachim *See* **Tafel, Werner; et al., (80a:47008)**
Woronowicz, S. L. *See* **Pusz, W., (80j:47019)**
Youngson, M. A. Hermitian operators on Banach Jordan algebras. **(80j:46090)**

47B20 Subnormal operators, hyponormal operators, etc.

Buch, Sumiti B. *See* **Prasanna, Shanti; et al., 80d:47035**
Campbell, Stephen L. (*with* Gupta, B. C.) On k-quasihyponormal operators. **80h:47030**
(*with* Gupta, B. C.) On k-quasihyponormal operators. **80f:47019**
Clancey, Kevin F. On the local spectra of seminormal operators. **80b:47031**
Fong, Che Kao (*with* Istrăţescu, Vasile I.) Some characterizations of Hermitian operators and related classes of operators. I. **80e:47022**
Furuta, Takayuki On relaxation of normality in the Fuglede-Putnam theorem. **80h:47037**
Gupta, B. C. *See* **Campbell, Stephen L., 80h:47030** *and* **Campbell, Stephen L., 80f:47019**
Hastings, William W. Subnormal operators quasisimilar to an isometry. **80h:47028**
Istrăţescu, Vasile I. *See* **Fong, Che Kao, 80e:47022**
Kim, H. W. (*with* Pearcy, Carl) Subnormal operators and hyperinvariant subspaces. **80g:47028**
Kujaev, P. N. Operator matrices, subnormality, hyponormality. (Russian. English summary) **80h:47032**
Lautzenheiser, R. G. Spectral theory for subnormal operators. **80h:47029**
Lubin, Arthur Extensions of commuting subnormal operators. **80h:47033**
Weighted shifts and commuting normal extension. **80j:47034**
Olin, Robert F. (*with* Thomson, James E.) Lifting the commutant of a subnormal operator. **80h:47034**
Parmar, A. K. *See* **Prasanna, Shanti; et al., 80d:47035**
Patel, S. M. Factorization of quasihyponormal operators. **80c:47027**

A class of non-hyponormal operators on Hilbert spaces. **80g:47029**
Essentially normaloid and essentially convexoid operators. **80c:47026**
Pearcy, Carl *See* **Kim, H. W., 80g:47028**
Prasanna, Shanti (*with* Parmar, A. K.; Buch, Smriti B.) On a paper of Phadke, Khasbardar and Thakare. **80d:47035**
Putnam, C. R. Hyponormal operators and spectral multiplicity. **80j:47036**
Hyponormal and essentially normal operators. **80j:47035**
Rai, S. N. On generalized paranormal operators. I. **80c:47028**
(Saitô, T.) *See* **Shah, N. C.; et al., 80a:47037**
Shah, N. C. (*with* Sheth, I. H.) Remark on a paper of T. Saitô: "On a theorem by S. M. Patel" (Rev. Roumaine Math. Pures Appl. 21 (1976), no. 10, 1407–1409). **80a:47037**
Sheth, I. H. *See* **Shah, N. C., 80a:47037**
Thomson, James E. *See* **Olin, Robert F., 80b:47034**
Vu Knok Fong Quasi-hyponormal operators and operators of class *K*. (Russian) **80k:47038**
Operators of class *K*. (Russian) **80j:47037**
Weiss, Gary The Fuglede commutativity theorem modulo the Hilbert-Schmidt class and generating functions for matrix operators. **80e:47023**
Wogen, Warren R. Quasinormal operators are reflexive. **80h:47030**
Xia, Dao Xing Nonnormal operators—semihyponormal operators. (Chinese. English summary) **80l:47039**

Secondary classifications:

Arora, Pushpa On joint numerical radius. **(80d:47005)**
Berger, Charles A. Sufficiently high powers of hyponormal operators have rationally invariant subspaces. **(80c:47006)**
Brown, Scott W. Some invariant subspaces for subnormal operators. **(80c:47007)**
Fong, Che Kao On *M*-hyponormal operators. **(80k:47036)**
Hastings, William W. A construction of Hilbert spaces of analytic functions. **(80f:46026)**
Jafarian, Ali A. (*with* Radjabalipour, Mehdi) Transitive algebra problem and local resolvent techniques. **(80m:47003)**
Radjabalipour, Mehdi *See* **Jafarian, Ali A., (80m:47003)**

47B25 Symmetric and selfadjoint operators (unbounded)

Babin, A. V. An expression for A^{-1} in terms of the iteration of the operator A which acts in a Banach space. (Russian) **80f:47020**
The expression of the solution of the equation $Au = h$ in terms of iterations of an unbounded operator A and weighted approximations of functions. (Russian) **80k:47029**
Brak, V. M. Linear relations in a space of vector-valued functions. (Russian) **80j:47038**
Fan van Čyong The uniqueness of integral representations of positive definite kernels. (Russian) **80h:47031**
Fishel, B. On the existence of closed Hermitian restrictions of selfadjoint operators. **80k:47032**
Glimm, James (*with* Jaffe, Arthur) A note on reflection positivity. **80m:47022**
Jaffe, Arthur *See* **Glimm, James, 80m:47022**
Jørgensen, Palle E. T. Essential self-adjointness of semibounded operators. **80b:47035**
Selfadjoint operator extensions satisfying the Weyl commutation relations. **80g:47030**
Selfadjoint extension operators commuting with an algebra. **80j:47039**
Kaballo, Winfried (*with* Schneider, Albert) On the spectral kernel of symmetric extensions. **80k:47030**
Kato, Tosio Trotter's product formula for an arbitrary pair of self-adjoint contraction semigroups. **80f:47040**
Kočubeĭ, A. N. Symmetric operators and nonclassical spectral problems. (Russian) **80j:47040**
Kosjak, A. V. (*with* Samoĭlenko, Ju. S.) Families of commuting selfadjoint operators. (Russian) **80m:47023**
Krein, M. G. (*with* Ovčarenko, I. E.) Inverse problems for *Q*-functions and resolvent matrices of positive Hermitian operators. (Russian) **80d:47036**
Langer, Heinz (*with* Textorius, B.) A generalization of M. G. Krein's method of directing functionals to linear relations. **80d:47037**
Leonte, Aristide A metric in the set of partitions of the unity. **80e:47024**
Mihaĭlec, V. A. Selfadjoint extensions of operators with a prescribed spectrum asymptotics. (Russian. English summary) **80d:47038**
Ovčarenko, I. E. *See* **Krein, M. G., 80d:47036**
Rozenbljum, G. V. Near-similarity of operators and the spectral asymptotic behavior of pseudo-differential operators on the circle. (Russian) **80m:47024**
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Sten'kin, V. V. The differentiability of functions of unbounded selfadjoint operators under a relatively bounded perturbation. (Russian. English summary) **80b:47036**
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Vajzović, Fikret Selfadjoint extensions of some symmetric operators. (Serbo-Croatian. Russian summary) **80a:47038**
Voigt, Jürgen On properties related to *A*-compactness, an example. **80b:47037**

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Cooper, Jacob Lionel Bakst The exponential map for symmetric operators in spaces with an indefinite scalar product. **(80k:47037)**
Devinatz, Allen On an inequality of Tosio Kato for degenerate-elliptic operators. **(80j:35038)**
Epifanio, G. (*with* Trapani, C.) On the matrix representation of closed linear operators: an extension of von Neumann's theory. **(80f:47014)**
Hooton, James G. Dirichlet forms associated with hypercontractive semigroups. **(80k:47050)**
Kalisch, Gerhard K. On singular self-adjoint Sturm-Liouville operators. **(80b:34021)**
Kraus, M. (*with* Wüst, R.) Characterization and uniqueness of distinguished selfadjoint extensions of Dirac operators. **(80k:81025)**
Trapani, C. *See* **Epifanio, G., (80f:47014)**
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47B35 Toeplitz operators, Wiener-Hopf operators [See also 45P05, 47G05 for other integral operators.]

Axler, Sheldon (*with* Chang, Sun Yung A.; Sarason, Donald) Products of Toeplitz operators. **80d:47039**
Butz, Jeffrey R. Unitary parts of generalized Hankel operators. **80d:47040**
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Cowen, Carl C. Commutants of analytic Toeplitz operators with automorphic symbol. **80g:47031**
Deundjak, V. M. Homotopy classification of Noetherian systems of multidimensional bisingular integral operators. (Russian) **80j:47041**
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Gohberg, Israel (*with* Lerer, L.; Rodman, Leiba) On canonical factorization of operator polynomials, spectral divisors and Toeplitz matrices. **80d:47042**
(*with* Levin, Sonia) Asymptotic properties of Toeplitz matrix factorization. **80g:47032**
Guseĭnov, G. Š. The determination of the infinite Jacobi matrix from two spectra. (Russian) **80g:47033**
Janas, J. Note on the spectral inclusion theorem for Toeplitz operators. **80a:47039**
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Kozak, A. V. (*with* Simonenko, I. B.) Projection methods for the solution of two-dimensional singular equations on a torus. (Russian) **80f:47021**
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Silbermann, Bernd Zur Berechnung von Toeplitz-Determinanten, die durch eine Klasse im wesentlichen beschränkter Funktionen erzeugt werden. **80j:47043**
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Cowen, Carl C. Commutants and the operator equations $AX = \lambda XA$. **(80l:47028)**
Cowen, M. J. (*with* Douglas, R. G.) Complex geometry and operator theory. **(80f:47012)**
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Douglas, R. G. *See* **Cowen, M. J., (80f:47012)**
Izuchi, Keiji The spectral mapping theorem for the Weyl spectrum and Oberai's problems. (Japanese summary) **(80f:47003)**
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Mikaeljan, L. V. Asymptotic behavior of Fredholm determinants for truncated integral operators with matrix kernels depending on the difference of arguments. (Russian. Armenian summary) **(80m:45006)**
Sacks, Richard *See* **Tung, Leonard J.; et al., (80b:93152)**
Šamojan, F. A. A class of Toeplitz operators that are connected with the divisibility of analytic functions. (Russian) **(80j:30049)**
Sarason, Donald ★Function theory on the unit circle. **(80d:30035)**
Staffans, Olof J. On the asymptotic spectrum of a convolution. **(80l:45025)**
Tung, Leonard J. (*with* Sacks, Richard; DeSantis, Romano M.) Wiener-Hopf filtering in Hilbert resolution space. **(80b:93152)**
Vainikko, G. (*with* Lepik, R.) On the reduction method for multidimensional discrete Wiener-Hopf equations. (Russian. Estonian and English summaries) **(80j:45019)**
Zarantonello, Sergio E. A representation of H^p-functions with $0 < p < \infty$. **(80g:30023)**

47B37 Operators on special spaces (weighted shifts, operators on sequence spaces, etc.)

Abrahamse, M. B. (*with* Bastian, J. J.) Bundle shifts and Ahlfors functions. **80c:47029**
Allen, G. D. (*with* Ward, Joseph D.) Hermitian liftings in $B(l_p)$. **80b:47040**
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Berwein, D. (*with* Jakimovski, A.) Matrix operators on l^p. **80h:47035**

Figotin, A. L. *See* **Pastur, L. A., 80k:47031**

Fleming, Richard J. (*with* Jamison, James E.) Commutants of triangular matrix operators. **80j:47044**

Gupta, D. K. *See* **Singh, R. K.; et al., 80l:47043**

Hadwin, Donald W. (*with* Hoover, Thomas B.) Weighted translation and weighted shift operators. **80g:47034**

Hoover, Thomas B. *See* **Hadwin, Donald W., 80g:47034**

Jakimovski, A. *See* **Borwein, D., 80h:47035**

Jamison, James E. *See* **Fleming, Richard J., 80j:47044**

Jewell, Nicholas P. (*with* Lubin, Arthur) Commuting weighted shifts and analytic function theory in several variables. **80c:47030**

Komal, B. S. *See* **Singh, R. K.; et al., 80l:47043**

Kramer, G. L. Reducing linear operators to simplest form in a space of multiple sequences. (Russian. English summary) **80g:47035**

Lubin, Arthur *See* **Jewell, Nicholas P., 80c:47030**

Nordgren, Eric A. Composition operators on Hilbert spaces. **80d:47046**

Ostrovskov, L. A. The characteristic function of a Weyl colligation in C^4. (Russian) **80j:47045**

Pastur, L. A. (*with* Figotin, A. L.) Ergodic properties of the distribution of eigenvalues of some classes of random selfadjoint operators. (Russian) **80k:47031**

Pilidi, V. S. Invariant subspaces of multiple weighted shift operators. (Russian) **80h:47036**

Similarity of multiple weighted shift operators. (Russian) **80k:47032**

Podporin, V. P. On the question of the representation of linear operators in the form of infinite order differential operators with generalized differentiation. (Russian) **80a:47042**

Singh, R. K. (*with* Gupta, D. K.; Komal, B. S.) Some results on composition operators in l^2. **80l:47043**

Siljuarčuk, V. E. Application of Wiener's theorem on absolutely convergent Fourier series to the study of equations in the space of almost periodic vector sequences. (Russian) **80a:47043**

Vasjunin, V. I. Unconditionally convergent spectral decompositions and interpolation problems. (Russian) **80b:47041**

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Campbell, Stephen L. (*with* Faulkner, Gary D.; Gardner, Marianne L.) Isometries on L^p spaces and copies of l^p shifts. **(80l:47005)**

Faulkner, Gary D. *See* **Campbell, Stephen L.; et al., (80l:47005)**

Gardner, Marianne L. *See* **Campbell, Stephen L.; et al., (80l:47005)**

Herrero, Domingo A. On multicyclic operators. **(80f:47013)**

Lee, Peng Yee Linear and nonlinear transformations between sequence spaces. **(80l:40005)**

Markus, A. S. (*with* Semencul, A. A.) Operators that weakly perturb the spectrum. (Russian) **(80b:47015)**

Natarajan, P. N. (*with* Rangachari, M. S.) Matrix transformations between sequence spaces over non-Archimedean fields. **(80j:46118)**

Nikol'skiĭ, N. K. Bases of invariant subspaces and operator interpolation. (Russian) **(80b:47021)**

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Semencul, A. A. *See* **Markus, A. S., (80b:47015)**

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Alò, Richard A. (*with* de Korvin, André) Application of bases to the study of measures and operators on measure spaces. **80a:47044**

Altomare, Francesco Generalized Lion operators and resolvent families. (Italian. English summary) **80d:47047**

Lion operators over the product of compact spaces, semigroups of positive operators, and the Dirichlet problem. (Italian) **80d:47048**

Anderson, Joel The Haar functions almost diagonalize multiplication by x. **80f:47022**

Bennett, Colin (*with* Sharpley, Robert C.) Weak-type inequalities in analysis. **80d:47049**

Brooks, James K. (*with* Lewis, Paul W.) Operators on continuous function spaces and convergence in the spaces of operators. **80d:47050**

(*with* Lewis, Paul W.) Operators on spaces of continuous functions. (Russian summary) **80k:47033**

Bukvalov, A. V. Continuity of operators in the spaces of measurable vector-valued functions with applications to the investigation of Sobolev spaces and analytic functions in the vector-valued case. (Russian) **80m:47025**

Cîrnu, Mircea The generating functions of Carleman linear operators. **80d:47051**

Sum and composition of Carleman linear operators. **80e:47026**

Dimovski, Ivan Hr. Representation of operators which commute with differentation in an invariant hyperplane. **80l:47044**

Duggal, B. P. Near normality of a class of transforms. **80h:47037**

Epifanov, O. V. The range of an operator of convolution type. (Russian) **80f:47023**

Preservation by the operator of convolution of the not entirely regular growth of functions. (Russian) **80f:47024**

Fakhoury, Hicham Représentations d'opérateurs à valeurs dans $L^1(X, \Sigma, \mu)$. **80e:47027**

Fischer, Werner (*with* Schöler, Ulrich) Integral representation of additive operators with respect to a vector measure and its applications. **80h:47038**

Fleming, Richard J. (*with* Jamison, James E.) Hermitian operators on $C(X, E)$ and the Banach-Stone theorem. **80m:47026**

Gupta, D. K. *See* **Singh, R. K., 80e:47031**

Halmos, Paul Richard (*with* Sunder, Viakalathur Shankar) ★Bounded integral operators on L^2 spaces. **80g:47036**

Iwanik, A. Extreme contractions on certain function spaces. **80f:47025**

Jamison, James E. *See* **Fleming, Richard J., 80m:47026**

Johnson, W. B. (*with* Jones, L.) Every L_p operator is an L_2 operator. **80f:47026**

Jones, L. *See* **Johnson, W. B., 80f:47026**

Kamowitz, Herbert Compact operators of the form uC_φ. **80f:47027**

Kan, Chaw Huen Ergodic properties of Lamperti operators. **80g:47037**

Karlovič, Ju. I. (*with* Kravčenko, V. G.) Integro-functional equations with non-Carleman shift in the space $L_2^n(0, 1)$. (Russian) **80j:47046**

Korotkov, V. B. The existence of nonintegral operators in certain two-sided operator ideals. (Russian) **80e:47028**

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Kurbatov, V. G. A conjecture in the theory of functional-differential equations. (Russian) **80b:47043**

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Lesnner, Lawrence Lattice properties of integral operators. **80a:47045**

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Liu, Kuang Chi On the inversion of the Weyl transform. **80d:47053**

Marcus, Moshe (*with* Mizel, Victor J.) Every superposition operator mapping one Sobolev space into another is continuous. **80h:47039**

Marek, Ivo Perron root of a convex combination of a positive kernel and its adjoint. (Russian and Czech summaries) **80c:47031**

Mayer, D. H. Spectral properties of certain composition operators arising in statistical mechanics. **80k:47040**

Menikes, L. D. The regularizability of mappings that are inverse to integral operators. (Russian) **80k:47034**

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Nagulloda, M. Î. Some remarks on the general form of linear continuous operators in the space of functions analytic in an annulus. (Russian. English summary) **80h:47041**

The roots of the operator of multiple integration in a space of functions analytic in the disc. (Russian) **80g:47038**

Peller, V. V. Estimates of operator polynomials in symmetric spaces. A functional calculus for absolute contractions. (Russian) **80j:47047**

Pitt, Loren D. A compactness condition for linear operators of function spaces. **80b:47044**

Raĭzinov, Ivan Linear operators defined in spaces of complex functions of many variables and commuting with the operators of integration. **80l:47045**

Ryndina, V. V. The equivalence of an nth-order differential operator having a regular singular point, and an Euler operator in the space $A(G)$. (Russian) **80j:47048**

Schep, A. R. Kernel operators. **80f:47028**

Schochetman, Irwin E. Kernels and integral operators for continuous sums of Banach spaces. **80a:47046**

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Sharpley, Robert C. *See* **Bennett, Colin, 80d:47049**

Singh, R. K. (*with* Kumar, Ashok) Characterizations of invertible, unitary, and normal composition operators. **80e:47030**

(*with* Gupta, D. K.) Regular Borel measures and composition operators on $L^p(\mu)$. **80e:47031**

Sobolev, A. V. Abstract oscillation operators. (Russian) **80m:47027**

Sunder, Viakalathur Shankar Absolutely bounded matrices. **80d:47052**

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Tjurin, V. M. Invertibility of the operator $d/dt - A(t)$ in some function spaces. (Russian) **80j:47049**

Tkačenko, V. A. Operators that commute with generalized integration in spaces of analytic functionals. (Russian) **80d:47054**

Unterberger, André Extensions du lemme de Cotlar et applications. (English summary) **80d:47055**

Verbickiĭ, I. È. Projection methods for the solution of singular integral equations with piecewise continuous coefficients. (Russian) **80d:47056**

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Antonevič, A. B. Operators that are generated by linear extensions of diffeomorphisms. (Russian) **(80a:58027)**

Bordin, Benjamin Weakly strongly singular integral operators in atomic Hardy spaces. (Portuguese) **(80g:42016)**

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Cooper, Jacob Lionel Bakst Linear transformations intertwining with group representations. **(80d:22005)**

Daubechies, Ingrid An application of hyperdifferential operators to holomorphic quantization. **(80a:81040)**

Dîn' Bat Thanh Some properties of sets that are connected with closed paths. (Russian) **(80b:45023)**

Fehér, Franziska *See* **Butzer, P. L., (80c:46037)**

Graham, Ivan G. (*with* Sloan, Ian H.) On the compactness of certain integral operators. **(80j:47059)**

Gross, Leonard Logarithmic Sobolev inequalities—a survey. **(80f:46035)**

Gusia, E. A class of nonlinear operators that are equivalent to the derivative in the space of analytic functions on C. (Italian. English summary) **(80c:47060)**

Halmos, Paul Richard Integral operators. **(80l:47070)**

de Jonge, Ep Conditional expectation and ordering. **(80e:60003)**

Kalton, Nigel Compact operators on symmetric function spaces. (Russian summary) **(80d:47029)**

Lumer, Guster Principe du maximum et équations d'évolution dans L^2. **(80h:31004)**

Mayer, Jacques Isometries in Banach spaces of functions, holomorphic in the unit disc and smooth up to its boundary. (Russian. English summary) **(80f:46023)**

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Napalkov, V. V. Operators that commute with differentiation in spaces of functions of several variables. (Russian) **(80f:32012)**

Nordgren, Eric A. Composition operators on Hilbert spaces. **(80d:47046)**

Riedel, Norbert Über die Zerlegung von Operatoren in topologischen direkten

Integralen von Hilberträumen. (80a:46031)

Ryndina, V. V. On the equivalence between an nth order differential operator with a regular singular point and an Euler operator in the space A_R. (Russian) (80k:47067)

Sloan, Ian H. *See* **Graham, Ivan G.,** (80j:47059)

Solov'ev, A. A. Estimates in L^p of the integral operators that are connected with spaces of analytic and harmonic functions. (Russian) (80k:46025)

Sourour, A. R. The isometries of $L^p(\Omega, X)$. (80c:46048)
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Stephenson, Kenneth Functions which follow inner functions. (80b:30030)

Sunder, Viakalathur Shankar Two characterization theorems for integral operators. (80d:47079)

Synoradzki, J. Einige verbandstheoretische Aussagen über den natürlichen partiell isometrischen Operator von $L_p^2(a, b)$ auf l^2 und über einige Integraltransformationen in $L_p^2(a, b)$. (80a:47059)

Weinzier, Fred B. Two-point inequalities, the Hermite semigroup, and the Gauss-Weierstrass semigroup. (80e:47037)

Wojtaszczyk, P. On weakly compact operators from some uniform algebras. (80f:46042)

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47B39 Difference operators [See also 39A70.]

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Secondary classifications:

Glazman, E. I. Extensions of differential-difference operators with periodic coefficients. (Russian) (80f:34060)

Guseinov, G. Š. The inverse problem for a nonselfadjoint second-order difference equation on the line with respect to a generalized spectral matrix. (Russian. Azerbaijani and English summaries) (80f:39004)

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Salvi, Rodolfo A generalization of the notion of spectral capacity. (Italian) 80m:47032

Shuchat, Alan *Spectral measures and homomorphisms.* 80a:47053

Sun, Shun Hua The spectrum distribution of completely controllable linear systems. (Chinese. English summary) 80d:47060

Turner, J. E. On well-bounded and decomposable operators. 80a:47054

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Secondary classifications:

Baillet, Michel Analyse spectrale des opérateurs hermitiens d'une espace de Banach. (80j:46080)

Gilfeather, Frank Reductive operators with certain spectral separation properties. (80f:47006)

Ginzburg, Ju. P. Spectral measures and the duality of spectral subspaces of contractions with a slowly growing resolvent. (Russian. English summary) (80a:47025)

Jafarian, Ali A. (*with* Radjabalipour, Mehdi) *Transitive algebra problem and local* resolvent techniques. (80m:47003)

Lomonosov, V. I. Joint approximate spectrum of a commutative family of operators. (Russian) (80j:47006)

Radjabalipour, Mehdi *See* **Jafarian, Ali A.,** (80m:47003)

Sirotkin, Ĭ. P. *A nonselfadjoint analogue of nonreflecting potentials.* (Russian) (80m:34022)

47B44 Accretive operators, dissipative operators, etc.

Albrecht, Ernst (*with* Neumann, Michael) Über die Stetigkeit von dissipativen linearen Operatoren. 80f:47030

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Erdos, J. A. Dissipative operators and approximation of inverses. 80h:47043

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Sohr, Hermann Störungskriterien im reflexiven Banachraum. 80i:47046

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Secondary classifications:

Adamjan, V. M. (*with* Pavlov, B. S.) Trace formula for dissipative operators. (Russian. English summary) (80k:47026)

Kopf, Christoph Zur Struktur rein dissipativer Transformationen. (80i:28038)

Pavlov, B. S. *See* **Adamjan, V. M.,** (80k:47026)

Rossi, Anna Maria (*with* Sambuceti, Patrizia) The existence of a local solution of an evolution equation in Banach spaces. (Italian. English summary) (80i:34111)

Sambucetti, Patrizia *See* **Rossi, Anna Maria,** (80i:34111)

47B47 Commutators, derivations

Anderson, Joel (*with* Bunce, John W.; Deddens, James A.; Williams, J. P.) C^*-algebras and derivation ranges. 80i:47047

Arora, S. C. (*with* Kumar, Ramesh) On a class of commutators. 80d:47061

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Amrein, Werner O. (*with* Pearson, D. B.) Commutators of Hilbert-Schmidt type and the scattering cross section. (80i:47010)

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47B50 Operators on a space with an indefinite metric

Akopjan, R. V. On the theory of the spectral function of a J-nonnegative operator. (Russian. Armenian and English summaries) 80a:47055

Arlinskiĭ, Ju. M. (*with* Derkač, V. A.) The inverse problem of the theory of characteristic operator-functions of unbounded operator colligations in the space Π_κ. (Russian) 80h:47044

Cooper, Jacob Lionel Bakst The exponential map for symmetric operators in spaces with an indefinite scalar product. 80k:47037

Daughtry, John The maximal nonnegative reducing subspaces of J-selfadjoint operators. 80d:47062

Derkač, V. A. *See* **Arlinskiĭ, Ju. M.,** 80h:47044

Jonas, Peter Zur Existenz von Eigenspektralfunktionen für J-positive Operatoren. I. 80i:47048a
Zur Existenz von Eigenspektralfunktionen für J-positive Operatoren. II. 80i:47048b

Krein, M. G. (*with* Langer, Heinz) Über einige Fortsetzungsprobleme, die eng mit der Theorie hermitescher Operatoren im Raume Π_κ zusammenhängen. II. Verallgemeinerte Resolventen, u-Resolventen und ganze Operatoren. 80h:47045

Langer, Heinz *See* **Krein, M. G.,** 80h:47045

McEnnis, Brian W. Purely contractive analytic functions and characteristic functions of noncontractions. 80i:47049

Sorjonen, Pekka On linear relations in an indefinite inner product space. 80g:47043

Spitkovskiĭ, I. M. The block structure of J-unitary operators. (Russian) 80a:47056
The block structure of J-unitary operators. II. (Russian) 80h:47046

Štraus, V. A. On the theory of selfadjoint operators in Banach spaces with a Hermitian form. (Russian) 80b:47047

Tapero, T. B. *Metric invariants of a pair of planes in infinite-dimensional spaces.* (Russian) 80m:47034

Utkin, V. I. On the theory of extensions and generalized resolvents of symmetric, dissipative and accumulative relations in Hilbert space with a regular G-metric. (Russian) 80i:47050

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Ito, Kelichi R. Canonical linear transformation on Fock space with an indefinite metric. (80b:81029)

Langer, Heinz (*with* Textorius, B.) A generalization of M. G. Krein's method of directing functionals to linear relations. (80d:47037)

Ôta, Shôichi Certain operator algebras induced by *-derivations in C^*-algebras on an indefinite inner product space. (80g:46051)

Textorius, B. *See* **Langer, Heinz,** (80d:47037)

47B55 Operators on ordered spaces

Arendt, Wolfgang *See* **Schaefer, Helmut H.; et al.,** 80b:47048

Duhoux, Michel o-weakly compact mappings from a Riesz space to a locally convex space. 80e:47057

Luxemburg, W. A. J. (*with* Schep, A. R.) A Radon-Nikodým type theorem for positive operators and a dual. 80a:47058
(*with* Schep, A. R.) An extension theorem for Riesz homomorphisms. 80i:47051

Meyer-Nieberg, Peter Eine Variante des Rieszschen Darstellungssatzes und ein Zerlegungssatz für sublineare Operatoren. **80b:47047**

Mironov, A. V. Boundedness and continuity of order-bounded linear mappings. (Russian) **80k:47038**

(*with* Sarymsakov, B. T.) Some properties of positive mappings of topological semi-ordered groups and vector spaces. (Russian) **80k:47039**

Niiro, Fumio *See* **Sawashima, Ikuko**, **80i:47052**

Oiceanu, Octav Convexité et prolongement d'opérateurs linéaires. (English summary) **80d:47063**

Sarymsakov, B. T. *See* **Mironov, A. V.**, **80k:47039**

Sawashima, Ikuko (*with* Niiro, Fumio) A reduction of a positive operator in an arbitrary Banach lattice to its irreducible components. **80i:47052**

Schaefer, Helmut H. (*with* Wolff, Manfred; Arendt, Wolfgang) On lattice isomorphisms with positive real spectrum and groups of positive operators. **80b:47048**

Scheffold, Egon Fixräume regulärer Operatoren und ein Korovkin-Satz. (English summary) **80b:47049**

Über Konvergenz linearer Operatoren. **80d:47064**

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Smickih, S. V. *See* **Zabreiko, P. P.**, **80j:47050**

Symatzschke, J. Einige verbandstheoretische Aussagen über den natürlichen partiell isometrischen Operator von $L^2_s(a, b)$ auf l^2 und über einige Integraltransformationen in $L^2_s(a, b)$. **80a:47059**

Takeo, Fukiko On a pole of the resolvent of positive operators. **80a:47060**

Wolff, Manfred *See* **Schaefer, Helmut H.**; **et al.**, **80b:47048**

Zabreiko, P. P. (*with* Smickih, S. V.) A theorem of M. G. Kreĭn and M. A. Rutman. (Russian) **80j:47050**

Zastavskiĭ, A. Ja. On the decomposition of invariant operators. (Russian) **80g:47044**

Secondary classifications:

Akilov, G. P. (*with* Kutateladze, S. S.) ★Упорядоченные векторные пространства. (Russian) [Ordered vector spaces] **(80i:46007)**

Baity, C. J. K. On some ergodic properties for continuous and affine functions. (French summary) **(80e:47007)**

(Bulavskiĭ, V. A.) *See* **Akilov, G. P.**; **et al.**, **(80i:46007)**

Geiler, V. A. Monotone seminorms and regular operators in vector lattices that are close to extended lattices. (Russian) **(80m:46006)**

Grobler, Jacobus J. A note on majorizing and cone absolutely summing operators in Banach lattices. **(80b:47027)**

Kutateladze, S. S. *See* **Akilov, G. P.**, **(80i:46007)**

Marek, Ivo Perron root of a convex combination of a positive kernel and its adjoint. (Russian and Czech summaries) **(80c:47031)**

Stecenko, V. Ja. Existence criteria for a positive solution of a linear operator equation. (Russian. Tajiki summary) **(80i:47022)**

Vasil'ev, R. K. Convergence of isotonic operators to the identity operator. (Russian) **(80c:41009)**

Equivalence of convergence conditions for isotone and positive additive operators. (Russian) **(80h:41011)**

47B99 None of the above, but in this section

Cîrnu, Mircea Carleman linear operators. **80c:47033**

Epifanio, G. (*with* Trapani, C.) Remarks on a theorem by G. Epifanio: "On the matrix representation of unbounded operators" [J. Math. Phys. 17 (1976), no. 9, 1688–1691; *MR 55 #8879*]. **80h:47048**

Harvey, Bernard N. An operator not a shift, integral, nor multiplication. **80i:47053**

Izumino, Saichi Inequalities on normal and antinormal operators. **80b:47050**

Longstaff, W. E. A note on transforms of subspaces of Hilbert space. **80i:47054**

Mititel, A. A. The interpolation of transformers of weak type in symmetrically normed ideals. (Russian) **80a:47061**

Rusak, Ju. B. Some relations between Jordan sets of an analytic operator-valued function and its conjugate. (Russian. Uzbek summary) **80a:47062**

Sarymsakov, B. T. A *K*-space of continuous selfadjoint endomorphisms in a Hilbert module over the semifield $\mathbb{R}^A$. (Russian) **80j:47051**

Trapani, C. *See* **Epifanio, G.**, **80h:47048**

Secondary classifications:

Baumgartner, B. A class of lower bounds for Hamiltonian operators. **(80b:81018)**

Bellenot, Steven F. Factorization of compact operators and finite representability of Banach spaces with applications to Schwartz spaces. **(80b:46024)**

Bezpal'cev, O. A. A matrix analogue of Nevanlinna's theorem. (Russian. English summary) **(80d:30024)**

Castellani, L. Quantization rules and Dirac's correspondence. (Italian and Russian summaries) **(80a:81011)**

On the invariance of $p_i \to -i\hbar(\partial/\partial x^i)$ under point transformations. (Italian and Russian summaries) **(80a:81051)**

Davies, E. Brian (*with* Spohn, Herbert) Open quantum systems with time-dependent Hamiltonians and their linear response. **(80a:81023)**

Dehesa, Jesús S. The eigenvalue density of rational Jacobi matrices. **(80a:82031)**

Diestel, Joe (*with* Seifert, C. J.) The Banach-Saks ideal. I. Operators acting on $C(\Omega)$. **(80a:47070)**

French, J. B. *See* **Pandey, A.**, **(80b:82017)**

Frolov, N. N. The essential selfadjointness of an infinite-dimensional differential operator. (Russian) **(80e:47042)**

George, Cl. (*with* Henin, F.; Mayné, F.; Prigogine, Ilya) New quantum rules for dissipative systems. **(80a:81042)**

Gervais, Jean-Loup Relevance of classical solutions to quantum theories. **(80a:81070)**

Goddard, Peter Magnetic monopoles and related objects. **(80a:81116)**

Górniak, Janusz Remarks on positive definite operator valued functions in linear spaces. **(80d:46086)**

Henin, F. *See* **George, Cl.**; **et al.**, **(80a:81042)**

Holevo, A. S. Estimation of shift parameters of a quantum state. **(80a:81060)**

Iagolnitzer, Daniel The $u=0$ structure theorem. **(80j:81073)**

Klauder, John R. New measures for nonrenormalizable quantum field theory. **(80b:81033)**

Krasnikov, V. A. On dynamic equations for the density operators in external fields. (Russian) **(80d:81042)**

Lagu, A. V. *See* **Menon, V. J.**, **(80b:81094)**

Lieb, Elliott H. New proofs of long range order. **(80b:82023)**

Liparteliani, A. G. *See* **Volkov, G. G.**; **et al.**, **(80b:81101)**

Mayné, F. *See* **George, Cl.**; **et al.**, **(80a:81042)**

Menon, V. J. (*with* Lagu, A. V.) A wave packet description of resonant states in potential scattering theory. **(80b:81094)**

Nieto, Michael Martin (*with* Simmons, L. M., Jr.) Eigenstates, coherent states, and uncertainty products for the Morse oscillator. **(80b:81031)**

Nikitin, Ju. P. *See* **Volkov, G. G.**; **et al.**, **(80b:81101)**

Ochs, Wilhelm When does a projective system of state operators have a projective limit? **(80g:46058)**

Pandey, A. (*with* French, J. B.) Binary correlations in random matrix spectra. **(80b:82017)**

Pekarev, È. L. Convolution on an operator domain. (Russian) **(80b:47001)**

Pokrovskiĭ, L. A. Nonequilibrium statistical operator method in the theory of one-mode lasers on two-level atoms. (Russian. English summary) **(80b:82029)**

Prigogine, Ilya *See* **George, Cl.**; **et al.**, **(80a:81042)**

Saito, Masahiko On the non-standard representation of linear mappings from a function space. **(80a:03091)**

Schroer, B. (*with* Truong, T. T.) The order/disorder quantum field operators associated with the two-dimensional Ising model in the continuum limit. **(80b:82019)**

Seeberg, O. On master operators with extremal entropy production. **(80a:82027)**

Seifert, C. J. *See* **Diestel, Joe**, **(80a:47070)**

Simmons, L. M., Jr. *See* **Nieto, Michael Martin**, **(80b:81031)**

Spohn, Herbert *See* **Davies, E. Brian**, **(80a:81023)**

Truong, T. T. *See* **Schroer, B.**, **(80b:82019)**

Vaĭaev, B. N. Realization of an integral in anticommuting variables. (Russian. English summary) **(80f:81053)**

Vilik, M. M. Applications of the Šnirel'man integral in non-Archimedean analysis. (Russian) **(80d:12015)**

Volkov, G. G. (*with* Liparteliani, A. G.; Nikitin, Ju. P.) Gauge schemes of weak and electromagnetic interactions. (Russian. English summary) **(80b:81101)**

Watanabe, Hisako A potential operator with respect to a resolvent and ergodic properties. **(80b:47010)**

Žumyrbaev, A. Additivity of the spaces $S^r_\gamma W(\Omega)$ ($r>0$ an integral vector). (Russian) **(80f:46040)**

47Cxx Single linear operators as elements of algebraic systems

47C05 Operators in algebras

Fakhoury, Hicham Approximation des bornés d'un espace de Banach par des compacts et applications. **80a:47063**

Longstaff, W. E. On the operation Alg Lat in finite dimensions. **80g:47045**

Secondary classifications:

Jafarian, Ali A. Algebras intertwining normal and decomposable operators. **(80h:47007)**

47C10 Operators in *-algebras

Secondary classifications:

Anderson, Joel (*with* Bunce, John W.; Deddens, James A.; Williams, J. P.) C^*-algebras and derivation ranges. **(80i:47047)**

Bunce, John W. *See* **Anderson, Joel**; **et al.**, **(80i:47047)**

Deddens, James A. *See* **Anderson, Joel**; **et al.**, **(80i:47047)**

Williams, J. P. *See* **Anderson, Joel**; **et al.**, **(80i:47047)**

47C15 Operators in C^*- or von Neumann algebras

Kaftal, Victor On the theory of compact operators in von Neumann algebras. II. **80g:47046**

Muratov, M. A. Convergences in a ring of measurable operators. (Russian) **80k:47040**

47C99 None of the above, but in this section

Loebl, Richard I. A remark on unitary orbits. **80m:47035**

47Dxx Algebraic systems of linear operators [See also 46Lxx.]

47D05 Semigroups of operators {For nonlinear operators, see 47H20; see also 20M20.}

Adewoye, T. O. An approximation theorem for semigroups of operators. (Italian summary) **80m:47036**

Babescu, Gh. On the boundedness and continuity of semigroups of operators of cosine-exponential type. (Romanian. German summary) **80i:47055**

Brenner, Philip (*with* Thomée, Vidar) On rational approximations of semigroups. **80j:47052**

Da Prato, Giuseppe (*with* Iannelli, Mimmo; Tubaro, Luciano) Semilinear stochastic differential equations in Hilbert spaces. (Italian summary) **80i:47056**

Embry-Wardrop, Mary (*with* Lambert, Alan) Weighted translation semigroups on $L^2(0, \infty)$. **80i:47057**

(*with* Lambert, Alan) The structure of a special class of weighted translation semigroups. **80a:47064**

See also **Lambert, Alan, 80b:47053**

Evans, David E. (*with* Hanche-Olsen, Harald) The generators of positive semigroups. **80b:47049**

Feyel, Denis Espaces complètement réticulés de pseudo-noyaux. Applications aux résolvantes et aux semi-groupes complexes. **80g:47047**

Une remarque sur le générateur d'une résolvante. (English summary) **80b:47051**

Górniak, Janusz An analogue of Sz.-Nagy's dilation theorem. II. (Russian summary) **80j:47053**

Grădinaru, N. The type of an n-parameter semigroup of linear operators. (Romanian summary) **80c:47052**

Guzmán, Alberto Fractional-power semigroups of growth n. **80a:47065**

Further study of growth of fractional-power semigroups. **80c:47034**

Hanche-Olsen, Harald *See* **Evans, David E., 80b:47049**

Hooton, James G. Dirichlet forms associated with hypercontractive semigroups. **80b:47050**

Hughes, Rhonda J. (*with* Kantorovitz, Shmuel) Boundary values of holomorphic semigroups of unbounded operators and similarity of certain perturbations. **80f:47031**

Iannelli, Mimmo *See* **Da Prato, Giuseppe; et al., 80f:47056**

Kantorovitz, Shmuel *See* **Hughes, Rhonda J., 80f:47031**

Kertz, Robert P. Limit theorems for semigroups with perturbed generators, with applications to multiscaled random evolutions. **80a:47066**

A semigroup perturbation theorem with application to a singular perturbation problem in nonlinear ordinary differential equations. **80d:47065**

Kurtz, Thomas G. A variational formula for the growth rate of a positive operator semigroup. **80e:47034**

Lambert, Alan (*with* Embry-Wardrop, Mary) A class of nilpotent semigroups on Hilbert space. **80b:47053**

See also **Embry-Wardrop, Mary, 80a:47064** *and* **Embry-Wardrop, Mary, 80f:47057**

Levan, Nhan (*with* Rigby, L.) On the reduction of a contraction semigroup to a completely nonunitary semigroup. **80m:47037**

Lumer, Gunter (*with* Paquet, Luc) Semi-groupes holomorphes, produit tensoriel de semi-groupes et équations d'évolution. **80k:47041**

Lutz, Dieter Which operators generate cosine operator functions? (Italian summary) **80k:47042**

Miyadera, Isao *See* **Shimizu, Makoto, 80e:47035**

Mukherjee, Rathindra Nath A Hille-Yosida-Phillips type of theorem for semi-groups in a locally convex space. **80d:47066**

Murtazaev, Ė. Ė. Equivalent semigroups of linear operators. (Russian) **80k:47043**

Nelson, S. (*with* Triggiani, Roberto) Analytic properties of cosine operators. **80b:47051**

Paquet, Luc *See* **Lumer, Gunter, 80k:47041**

Plotkin, Ja. D. (*with* Turbin, A. F.) Decomposition of singularly perturbed analytic semigroups of operators. (Russian) **80f:47058**

Rigby, L. *See* **Levan, Nhan, 80m:47037**

Roth, Jean-Pierre Semi-groupes de mesures matricielles. **80f:47059**

Satō, Ryōtarō Contraction semigroups in Lebesgue space. **80b:47054**

On local ergodic theorems for positive semigroups. **80b:47055**

Ščerbakova, R. I. Evolution representations of the algebra $L_\rho(\mathbf{R}^n_+)$. (Russian) **80b:47056**

Shimizu, Makoto (*with* Miyadera, Isao) Perturbation theory for cosine families on Banach spaces. **80e:47035**

Simon, Barry Kato's inequality and the comparison of semigroups. **80e:47036**

Singh, Harshinder The mixed semigroup relation. **80a:47067**

Thomée, Vidar *See* **Brenner, Philip, 80j:47052**

Triggiani, Roberto *See* **Nelson, S., 80b:47051**

Tubaro, Luciano *See* **Da Prato, Giuseppe; et al., 80f:47056**

Turbin, A. F. *See* **Plotkin, Ja. D., 80f:47058**

Weissler, Fred B. Logarithmic Sobolev inequalities for the heat-diffusion semigroup. **80b:47057**

Two-point inequalities, the Hermite semigroup, and the Gauss-Weierstrass semigroup. **80e:47037**

Secondary classifications:

Abramovič, V. S. Semigroups of M. M. Džrbašjan integral operators. (Russian) **80f:47068**

Baillon, Jean-Bernard Générateurs et semi-groupes dans les espaces de Banach uniformement lisses. (English summary) **80f:47090**

Balabane, M. (*with* Emamirad, H. A.) Smooth distribution group and Schrödinger equation in $L^p(\mathbf{R}^n)$. **80j:46063**

Batty, C. J. K. Dissipative mappings with approximately invariant subspaces. **80m:47033**

Butzer, P. L. (*with* Dickmeis, W.; Hahn, Lothar; Nessel, R. J.) Lax-type theorems and a unified approach to some limit theorems in probability theory with rates. **80m:60027**

Cercignani, Carlo (*with* Greenberg, William; Zweifel, P. F.) Global solutions of the Boltzmann equation on a lattice. **80c:35085**

Curtain, Ruth F. (*with* Pritchard, Anthony J.) A semigroup approach to infinite-dimensional system theory. **80e:93073**

Dickmeis, W. *See* **Butzer, P. L.; et al., 80m:60027**

Emamirad, H. A. *See* **Balabane, M., 80j:46063**

Fehér, Franziska Fractional Lipschitz spaces generated by rearrangement-invariant norms. **80c:46072**

Feinsilver, Philip J. ★Special functions, probability semigroups, and Hamiltonian flows. **80c:60093a**)

Operator calculus. **80c:60093b**)

Feyel, Denis Théorèmes de convergence presque-sûre. Existence de semi-groupes. **80m:47006**

Greenberg, William *See* **Cercignani, Carlo; et al., 80c:35085**

Hahn, Lothar *See* **Butzer, P. L.; et al., 80m:60027**

Hazod, W. Subordination von Faltungs- und Operatorhalbgruppen. **80j:60023**

Ishii, Susumu An approach to linear hyperbolic evolution equations by the Yosida approximation method. **80b:34073**

Kato, Tosio Trotter's product formula for some nonlinear semigroups. **80f:47061**

Trotter's product formula for an arbitrary pair of self-adjoint contraction semigroups. **80f:47040**

Kluvánek, Igor Représentations intégrales d'évolutions perturbées. (English summary) **80d:46067**

Kühne, R. ★Invariante Masse als Fixpunkte von Halbgruppen positiver Operatoren in KB-Räumen. **80d:46010**

Leitman, M. J. On plane waves propagating into a random fluid: asymptotic behavior. **80m:76069**

Levan, Nhan The stabilizability problem: a Hilbert space operator decomposition approach. **80a:93138**

Mika, Janusz Singular perturbation method for evolution equations in Banach spaces. **80j:34073**

Mlak, W. Dissipative random processes. **80g:60032**

Montgomery, John T. (*with* Sine, Robert; Thomas, Edward) Some topological properties of weakly almost periodic mappings. **80k:54078**

Nessel, R. J. *See* **Butzer, P. L.; et al., 80m:60027**

Olubummo, A. Unbounded multiplier operators. **80m:43004**

Paquet, Luc Problèmes mixtes pour le système de Maxwell. (English summary) **80i:58039**

Pritchard, Anthony J. *See* **Curtain, Ruth F., 80e:93073**

Satō, Ryōtarō Ergodic theory and the approximate solution of simultaneous linear functional equations. **80g:47008**

Sherman, Jon A new characterization of amenable groups. **80k:43001**

Sine, Robert Structure and asymptotic behavior of abstract dynamical systems. **80d:54051**

See also **Montgomery, John T.; et al., 80k:54078**

Sloan, Alan A note on exponentials of distributions. **80m:46035**

Sohr, Hermann Störungskriterien im reflexiven Banachraum. **80f:47046**

Thomas, Edward *See* **Montgomery, John T.; et al., 80k:54078**

Vanheuverzwijn, Paul Generators for quasifree completely positive semigroups. (French summary) **80b:46105a**)

Volcu, Mihai Dissipative and codissipative operators, and applications. (Romanian. English summary) **80g:47042**

Wolff, Manfred On C_0-semigroups of lattice homomorphisms on a Banach lattice. **80b:46026**

Zweifel, P. F. *See* **Cercignani, Carlo; et al., 80c:35085**

47D07 Markov semigroups {For Markov processes, see 60Jxx.}

Langer, Heinz (*with* Schenk, W.) A class of infinitesimal generators of one-dimensional Markov processes. II. Invariant measures. **80k:47044**

Schenk, W. *See* **Langer, Heinz, 80k:47044**

Secondary classifications:

Altomare, Francesco Lion operators over the product of compact spaces, semigroups of positive operators, and the Dirichlet problem. (Italian) **80d:47048**

Davies, E. Brian Master equations: a survey of rigorous results. (Italian summary) **80i:82033**

Heyer, Herbert Semi-groupes de convolution sur un groupe localement compact et applications à la théorie des probabilités. **80i:60009**

Lin, T. F. Functional integrals related to a noncontraction semigroup. **80i:28030**

47D10 Groups of operators

Cioranescu, Ioana Analytic generator and spectral subspaces for tempered distribution groups. **80a:47068**

Secondary classifications:

Arendt, Wolfgang *See* **Schaefer, Helmut H.; et al., 80b:47048**

Bratteli, Ola (*with* Herman, Richard H.; Robinson, Derek W.) Perturbations of flows on Banach spaces and operator algebras. **80a:46038**

Herman, Richard H. *See* **Bratteli, Ola; et al., 80a:46038**

van der Put, M. Finite-dimensional normed K-vectorspaces. **80f:46064**

Robinson, Derek W. *See* **Bratteli, Ola; et al., 80a:46038**

Schaefer, Helmut H. (*with* Wolff, Manfred; Arendt, Wolfgang) On lattice isomorphisms with positive real spectrum and groups of positive operators. **80b:47048**

Wolff, Manfred *See* **Schaefer, Helmut H.; et al., 80b:47048**

47D15 Linear spaces of operators

Abatzoglou, Theagenis J. Norm derivatives on spaces of operators. **80d:47067**

Abramovič, Ju. A. The space of operators that act between Banach lattices. (Russian. English summary) **80a:47069**

Beattie, Ronald On the convergence vector space $\mathcal{E}_\tau(E, F)$ and its dual space. **80b:47058**

Brillouët, Nicole Opérateurs extrémaux dans la boule unité de $L[E, \mathcal{C}(Y)]$. (English summary) **80i:47060**

Cristescu, Romulus Espaces ordonnés d'opérateurs linéaires et continus. **80f:47032**

Diestel, Joe (*with* Seifert, C. J.) The Banach-Saks ideal. I. Operators acting on $C(\Omega)$. **80a:47070**

Fakhoury, Hicham Quelques propriétés de l'espace des opérateurs compacts. **80k:47045**

Lima, Aswald Intersection properties of balls in spaces of compact operators. **80g:47048**

Mach, Jaroslav (*with* Ward, Joseph D.) Approximation by compact operators on certain Banach spaces. **80j:47054**

Muratov, M. A. The Luxemburg norm in an Orlicz space of measurable operators. (Russian) **80f:47061**
Seifert, C. J. *See* **Diestel, Joe, 80a:47070**
Ward, Joseph D. *See* **Mach, Jaroslav, 80j:47054**

Secondary classifications:

Larman, D. G. On a conjecture of Lindenstrauss and Perles in at most 6 dimensions. **(80c:46027)**
Padmanabhan, A. R. Some new linear topological spaces (of operators), with trivial and nontrivial duals. **(80h:46103)**
Snipes, Ray F. Vector topologies on spaces of sequentially continuous linear transformations. **(80c:46009)**
Wojtaszczyk, P. The space of multipliers into l_1. **(80e:46009)**

47D20 Convex sets and cones of operators

Luschgy, Harald Extreme invariant positive operators on L_p-spaces. **80d:47068**

Secondary classifications:

Chong, Kong Ming A rearrangement inequality. **(80j:26018)**
Loebl, Richard I. A remark on unitary orbits. **(80m:47035)**

47D25 Operator algebras and ideals, on Hilbert space

Archbold, Robert J. On the "flip-flop" automorphism of $C^*(S_1, S_2)$. **80e:47038**
Arveson, William *See* **Fall, Thomas; et al., 80f:47035**
Blass, Andreas (*with* Weiss, Gary) A characterization and sum decomposition for operator ideals. **80a:47071**
Deddens, James A. Another description of nest algebras. **80f:47033**
Fall, Thomas (*with* Arveson, William; Muhly, Paul S.) Perturbations of nest algebras. **80f:47035**
Kadison, Richard V. Similarity of operator algebras. **80d:47069**
Larson, David R. On the structure of certain reflexive operator algebras. **80f:47062**
Muhly, Paul S. *See* **Fall, Thomas; et al., 80f:47035**
Müller, Jürgen Topologische Operatorenideale auf einem separablen Hilbertraum. (Russian and English summaries) **80k:47046**
Ovčinnikov, V. I. Interpolation orbits of the classes $\mathfrak{S}_p$ in pairs of Hilbert spaces. (Russian) **80k:47047**
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Schmüdgen, Konrad Trace functionals on unbounded operator algebras. **80d:47071**
Simon, Barry ★Trace ideals and their applications. **80k:47048**
Stampfli, Joseph G. On a question of Deddens. **80f:47034**
Wang, S. P. On algebras of operators of finite rank. **80a:47072**
Weiss, Gary *See* **Blass, Andreas, 80a:47071**

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Apostol, Constantin Ultraweakly closed operator algebras. **(80k:47005)**
Azoff, Edward A. Kaplansky-Hilbert modules and the self-adjointness of operator algebras. **(80b:46073)**
Harris, Lawrence A. Operator Siegel domains. **(80g:32047)**
Kaminker, Jerome (*with* Schochet, Claude) Analytic equivariant K-homology. **(80f:55006)**
Kishimoto, Akitaka (*with* Takai, Hiroshi) The Calkin algebra is not asymptotically abelian. **(80h:46092)**
Korotkov, V. B. The existence of nonintegral operators in certain two-sided operator ideals. (Russian) **(80e:47028)**
Kubo, Fumio *See* **Kubo, Kyoko, (80g:46050a)** *and* **Kubo, Kyoko, (80g:46050b)**
Kubo, Kyoko (*with* Kubo, Fumio) Extreme points of the unit ball in an operator algebra. **(80g:46050a)**
(*with* Kubo, Fumio) Extreme points of convex sets in operator algebras. **(80g:46050b)**
Mitiagin, A. A. The interpolation of transformers of weak type in symmetrically normed ideals. (Russian) **(80a:47061)**
Ota, Shôichi Certain operator algebras induced by *-derivations in C^*-algebras on an indefinite inner product space. **(80g:46051)**
Redheffer, Raymond (*with* Volkmann, Peter) Differential equations in operator algebras. I. Invariance of the Siegel disk. **(80i:34108)**
Schochet, Claude *See* **Kaminker, Jerome, (80f:55006)**
Takai, Hiroshi *See* **Kishimoto, Akitaka, (80h:46092)**
Todorov, Todor Stefanov An irreducibility criterion for operator algebras in a Hilbert space. (Bulgarian. Russian and English summaries) **(80a:46030)**
Volkmann, Peter *See* **Redheffer, Raymond, (80i:34108)**

47D30 Operator algebras and ideals, on Banach spaces and other linear topological spaces

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Brown, H. I (*with* Cass, F. P.; Robinson, I. J. W.) On isomorphisms between certain subalgebras of $B(X)$. **80a:47073**
Breui, John J. (*with* Klein, A.) On the generalized Calkin algebra. **80e:47039**
Cass, F. P. Subalgebras of $B(l_1)$ and the Stone-Čech Compactification βN. **80i:47063**
See also **Brown, H. I; et al., 80a:47073**
Christensen, Erik (*with* Peligrad, Costel) Commutants of nest algebras modulo the compact operators. **80m:47038**
Diestel, Joe (*with* Seifert, C. J.) Errata to the paper: "The Banach-Saks ideal. I. Operators acting on $C(\Omega)$" [Comment. Math. Special Issue 1 (1978), 109–118; MR 80a:47070]. **80j:47055**
Dowson, H. R. (*with* Gillespie, T. A.) A representation theorem for a complete Boolean algebra of projections. **80m:47039**
Evans, Richard B. Boolean algebras of projections. **80b:47052**
Fourie, Jan (*with* Swart, Johan) Banach ideals of p-compact operators. **80b:47059**
Gillespie, T. A. *See* **Dowson, H. R., 80m:47039**
Heinrich, Stefan Finite representability of operators. **80m:47040**
(*with* Pietsch, Albrecht) A characterization of (∞, p, q)-integral operators. **80j:47056**
Hennefeld, Julien $L(X)$ as a subalgebra of $K(X)^{**}$. **80j:47057**
Kahanpää, Lauri Operatorenideale über lokalkonvexen Räumen. **80d:47072**
Klein, A. *See* **Buoni, John J., 80e:47039**
Meyer-Nieberg, Peter Kegel p-absolutsummierende und p-beschränkende Operatoren. **80b:47053**
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Pietsch, Albrecht Recent progress and open problems in the theory of operator ideals. **80f:47036**
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Samarskiĭ, V. G. The construction of an operator ideal by means of Bernitein's s-numbers. (Russian. English summary) **80e:47036**
Schmüdgen, Konrad Lokal multiplikativ konvexe Op^*-Algebren. **80m:47042**
Seifert, C. J. *See* **Diestel, Joe, 80j:47055**
Smith, R. R. (*with* Ward, Joseph D.) M-ideals in $B(l_p)$. **80j:47058**
Swart, Johan *See* **Fourie, Jan, 80b:47059**
Truhil'o, R. *See* **Vasilevskiĭ, N. L., 80k:47049**
Vasilevskiĭ, N. L. (*with* Truhil'o, R.) On Φ_R-operators in matrix algebras of operators. (Russian) **80k:47049**
Ward, Joseph D. *See* **Smith, R. R., 80j:47058**

Secondary classifications:

Carl, B. (*with* Pietsch, Albrecht) Some contributions to the theory of s-numbers. **(80g:47025)**
Cooper, James Bell ★Saks spaces and applications to functional analysis. **(80k:46030)**
Diestel, Joe (*with* Seifert, C. J.) The Banach-Saks ideal. I. Operators acting on $C(\Omega)$. **(80a:47070)**
Hennefeld, Julien M-ideals, HB-subspaces, and compact operators. **(80j:46030)**
Linde, Werner Operator ideals and vector measures. **(80j:46071)**
Martikainen, Olli Convolutions of noncommutative analogues of vector measures with applications to operator ideals. **(80h:46111)**
Michor, Peter W. ★Functors and categories of Banach spaces. **(80k:46116)**
Oloff, R. Entropieeigenschaften von Diagonaloperatoren. **(80i:47035)**
Pelletier, Joan Wick Dual functors and the Radon-Nikodým property in the category of Banach spaces. **(80k:46117)**
Pietsch, Albrecht *See* **Carl, B., (80g:47025)**
Samarskiĭ, V. G. (s, μ)-similar operators in Banach spaces. (Russian. English summary) **(80d:47033)**
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47D35 Dual spaces of operator algebras and topological groups

47D40 Algebras of unbounded operators

Antoine, Jean-Pierre Partial inner product spaces: another approach to unbounded operators. **80c:47037**
Friedrich, M. (*with* Lassner, Gerd) Angereicherte Hilberträume, die zu Operatorenalgebren assoziiert sind. **80f:47037**
Lassner, Gerd Algebras of unbounded operators and representations. **80f:47038**
The β-topology on operator algebras. (French summary) **80m:47043**
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Schmüdgen, Konrad On trace representation of linear functionals on unbounded operator algebras. **80h:47054**

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Čilin, V. I. Homomorphisms of topological O^*-algebras. (Russian) **(80h:46084)**
Lassner, Gerd Topologisierung lokaler Observablenalgebren und die Dynamik des Supraleiters. **(80h:81043)**
Moore, Steven M. $*$-algebras of unbounded operators in statistical mechanics. **(80c:81049)**
Pavlov, R. (*with* Todorov, Todor Stefanov) Algebras of unbounded operators and their application in relativistic quantum field theory. (Bulgarian. English summary) **(80c:81014)**
Schmüdgen, Konrad Trace functionals on unbounded operator algebras. **(80d:47071)**
Thunermann, Werner Classification of domains. **(80h:47002)**
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47D45 Applications to physics

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Alicki, Robert The theory of open systems in application to unstable particles. **(80d:82028)**
Biedenharn, L. C. *See* **van Dam, H., (80d:81118)**
de Boer, W. P. H. (*with* van Weert, Ch. G.) A note on Keldysh's perturbation formalism. **(80h:81122)**
Brankov, I. G. (*with* Tončev, N. S.; Zagrebnov, V. A.) On a class of exactly soluble statistical mechanical models with nonpolynomial interactions. **(80h:82026)**
Buchholz, Detlev (*with* Łopuszański, J. T.) Non-local charges: a new concept in quantum field theory. **(80g:81057)**
van Dam, H. (*with* Biedenharn, L. C.) An explicit model exhibiting a generalization of global supersymmetry. **(80d:81118)**

Federbush, Paul Positivity conditions on correlation functions that imply Debye screening. (80c:82004)
Grudziński, Hubert *See* Pruski, S., (80c:81027)
Il'in, V. A. Local nets of algebras of observables for a free scalar charged field. (Russian) (80f:82017)
Kolomiĭcev, V. Ĭ. (*with* Samoĭlenko, Ju. S.) A countable set of commuting selfadjoint operators and the algebra of local observables. (Russian) (80m:81024)
Kučaĭ, S. A. (*with* Tarasov, R. P.) Direct and inverse problems of perturbation propagation in a directional medium, and their approximate solution. (Russian) (80m:78009)
Lassner, G. A. Statistical systems with well-defined entropy. (80c:82043)
See also Lassner, Gerd, (80m:82012)
Lassner, Gerd (*with* Lassner, G. A.) On the continuity of entropy. (80m:82012)
Łopuszański, J. T. *See* Buchholz, Detlev, (80g:81057)
Pruski, S. (*with* Grudziński, Hubert) The structure of the Q-family of mappings in the n-representability theory. II. (80c:81027)
Contractions of expansions of fermion operators. (80k:81057)
Pulè, J. V. (*with* Verbeure, André) The classical limit of quantum dissipative generators. (80d:81026)
Samoĭlenko, Ju. S. *See* Kolomiĭcev, V. Ĭ., (80m:81024)
Tarasov, R. P. *See* Kučaĭ, S. A., (80m:78009)
Todorov, Todor Stefanov On the commutativity of superselection rules in axiomatic quantum field theory. (80a:81007)
Tončev, N. S. *See* Brankov, Ĭ. G.; et al., (80b:82026)
Verbeure, André *See* Pulè, J. V., (80d:81026)
van Weert, Ch. G. *See* de Boer, W. P. H., (80k:81122)
Zagrebnov, V. A. *See* Brankov, Ĭ. G.; et al., (80b:82026)

47D99 None of the above, but in this section

Bacan, G. P. Multiplicative parametric semigroups. (Russian. English summary) 80k:47050
Karasev, M. V. Operators of the regular representation for a class of non-Lie commutation relations. (Russian) 80k:47051
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Morley, T. D. Several applications of the shorted operator. (80m:94077)
Woronowicz, S. L. ★Operator systems and their application to the Tomita-Takesaki theory. (80h:46106)

47E05 Ordinary differential operators [See also 34B25, 58Fxx.]

Achour, Abdennebi (*with* Trimèche, Khélifa) Opérateurs de translation généralisée associés à un opérateur différentiel singulier sur un intervalle borné. (English summary) 80l:47064
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Ben-Artzi, Matania Spectral properties of linear ordinary differential operators with slowly decreasing coefficients. 80l:47066
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Carlson, Robert Expansions associated with nonselfadjoint boundary value problems. 80c:47040
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Evzerov, I. D. The domain of definition of fractional powers of ordinary differential operators in Hölder spaces with weight. (Russian) 80f:47040
Fishel, B. (*with* Denkel, N.) Reducibility of differential operators—some examples. 80f:47041
Gaborak, Ja. N. (*with* Kušnirčuk, Ĭ. F.; Ponjuk, M. I.) Equivalence of third order differential operators with a regular singular point. (Russian) 80a:47074
Gilbert, Richard C. A class of symmetric ordinary differential operators whose deficiency numbers differ by an integer. 80f:47042
Hinton, Don B. Eigenfunction expansions and spectral matrices of singular differential operators. 80d:47073
Ivanov, S. A. Completeness of the system of resonance states of a "polar" matrix operator. (Russian. English summary) 80d:47074
Kasymov, E. A. (*with* Otelbaev, M.) Essential selfadjointness of a differential operator. (Russian. Kazakh summary) 80k:47052
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Operators generated by countably many differential operators. 80a:47075
Mslamud, M. M. Perturbations of the operator of differentiation. (Russian) 80c:47038
Nagnibida, N. Ĭ. (*with* Oliĭnyk, N. P.) Equivalence of some second-order differential operators in a space of entire functions. (Russian) 80c:47039
Nasr, A. H. On the spectral functions of selfadjoint operators. (Arabic summary) 80m:47045
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Russakovskiĭ, R. M. Operator treatment of a boundary value problem with a spectral parameter that occurs rationally in the boundary conditions. II. (Russian) 80k:47054
Rundina, V. V. On the equivalence between an nth order differential operator with a regular singular point and an Euler operator in the space A_R. (Russian) 80l:47067
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Trimèche, Khélifa *See* Achour, Abdennebi, 80l:47064

Secondary classifications:

Antonec, M. A. The scattering problem in classical mechanics. (Russian) 80b:70010
Auberson, G. (*with* Mennessier, G.; Mahoux, G.) On the perturbation theory of the anharmonic oscillator at large orders. (Italian and Russian summaries) 80c:81030
Davis, Jon H. A multi-time scale method in almost-periodic stability problems. 80a:34064
Dym, Harry (*with* Kravitsky, Naftali) On the inverse spectral problem for the string equation. 80c:34017
Everitt, W. N. (*with* Zettl, A.) Products of differential expressions without smoothness assumptions. 80c:34018
Feigin, V. I. Estimates of the length of gaps in the spectrum of a first-order system. (Russian) 80k:34031
Firsova, N. E. Some spectral identities for a one-dimensional Hill operator. (Russian. English summary) 80b:81111
Gordon, A. Ja. The continuous spectrum of a one-dimensional Schrödinger operator. (Russian) 80h:34026
Guseĭnov, V. G. *See* Maksudov, F. G., 80b:34023
Hačatrjan, I. G. Transformation operators for high order differential equations. (Russian. Armenian and English summaries) 80e:34012
Hinton, Don B. Deficiency indices of odd-order differential operators. 80d:34024
Ikeda, Mineo (*with* Nishino, Yoshio) On the symmetry of nondegenerate, selfadjoint differential operators of the second order. 80g:58052
Kac, Ĭ. S. Some general theorems on the density of the spectrum of a string. (Russian) 80f:34022
Kauffman, Robert M. The number of Dirichlet solutions to a class of linear ordinary differential equations. 80f:34023
Kočubeĭ, A. N. Symmetric operators and nonclassical spectral problems. (Russian) 80j:47040
Kostjučenko, A. G. (*with* Škalikov, A. A.) Summability of expansions in eigenfunctions of differential operators and of convolution operators. (Russian) 80d:34017
Kravitsky, Naftali *See* Dym, Harry, 80c:34017
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Lee, Sung J. Perturbations of operators, with application to ordinary differential operators. 80e:47011
Lundina, D. Š. Exact dependence between asymptotic formulas for the eigenvalues of the Sturm-Liouville operator and the smoothness of the potential. (Russian) 80a:34024
Mahoux, G. *See* Auberson, G.; et al., 80c:81030
Maksudov, F. G. (*with* Guseĭnov, V. G.) Asymptotic behavior of the number of eigenvalues of the Sturm-Liouville equation with an operator coefficient on the half-axis. (Russian. Azerbaijani and English summaries) 80b:34023
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Misjura, T. V. Characterization of the spectra of the periodic and antiperiodic boundary value problems that are generated by the Dirac operator. (Russian) 80a:34025
Characteristics of the spectra of the periodic and antiperiodic boundary value problems that are generated by the Dirac operator. II. (Russian) 80l:34034
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Paiaeva, É. É. The spectrum of a fourth-order nonselfadjoint differential operator on the half-axis. (Russian) 80e:34013
Poletaev, G. S. On the theory of abstract analogues of certain equations of convolution type. (Russian) 80e:47025
Saryev, M. A. A selfadjoint boundary value problem for a two-parameter Hamiltonian equation. (Russian. Turkmen summary) 80m:34021
Schmidt, Dieter Spektraleigenschaften und kanonische Fundamentallösungen linearer Differentialoperatoren bei einfachen Singularitäten. 80d:34087
Schmincke, U.-W. On Schrödinger's factorization method for Sturm-Liouville operators. 80f:34025
Škalikov, A. A. *See* Kostjučenko, A. G., 80d:34017
Tjurin, V. M. Invertibility of the operator $d/dt - A(t)$ in some function spaces. (Russian) 80j:47049
Wierzbowski, Mirosław A. On the spectral properties of the operator $Lu = q_0(x)u^{(m)} + \cdots + q_{m-1}\,x(u) + q_m(x)$ with periodic q_n in the Besicovitsch space $B^2(\mathbf{R})$. (Russian summary) 80c:34021
Zettl, A. *See* Everitt, W. N., 80c:34018
Zirilli, Francesco Spectral properties of some one-dimensional "singular" Schrödinger Hamiltonian. II. (Italian summary) 80d:34031
Zubov, V. M. The closedness of the generalized Green matrices of linear differential operators. (Russian) 80c:34023
Zverkin, A. M. The spectrum of a degenerate boundary value problem. (Russian) 80a:34098

47F05 Partial differential operators [See also 35Pxx, 58Gxx.]

de Bivar-Weinholtz, António (*with* Piraux, Rémi) Formule de Trotter pour l'opérateur de Schrödinger avec un potentiel singulier complexe. (English summary) 80c:47040

Frolov, N. N. The essential selfadjointness of an infinite-dimensional differential operator. (Russian) **80e:47042**

Piraux, Rémi *See* **de Bivar-Weinholtz, António, 80c:47040**

Roth, Jean-Pierre Les opérateurs elliptiques comme générateurs infinitésimaux de semi-groupes de Feller. **80g:47052**

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Avron, J. E. (*with* Herbst, I. W.; Simon, Barry) Schrödinger operators with magnetic fields. I. General interactions. **(80k:35054)**

Babin, A. V. Expressing the solution of a differential equation in terms of iterations of differential operators. (Russian) **(80b:35025)**

Fractional powers of a nonlinear analytic differential operator. (Russian) **(80k:47083)**

Beĭ'kin, G. Ja. The separation of two-body Coulomb singularities in a system of four charged particles. (Russian. English summary) **(80b:81096)**

Bemelmans, Josef Eine Aussenraumaufgabe für die instationären Navier-Stokes-Gleichungen. **(80j:76022)**

Benci, Vieri (*with* Fortunato, Donato) Second-order elliptic operators on unbounded domains. (Italian summary) **(80f:35041a)**

(*with* Fortunato, Donato) Errata corrige: "Second-order elliptic operators on unbounded domains" [Boll. Un. Mat. Ital. B (5) **15** (1978), no. 1, 193–209; MR 80f:35041a]. **(80f:35041b)**

Bocchieri, P. (*with* Loinger, A.) Nonexistence of the Aharonov-Bohm effect. (Italian and Russian summaries) **(80j:81041)**

Braičev, G. G. (*with* Moržakov, V. V.) Applicability of operators of infinite order in partial differential equations. (Russian) **(80c:35105)**

Chavel, I. (*with* Feldman, E. A.) Spectra of domains in compact manifolds. **(80c:58027)**

Coleman, Robert Alan Space-time operators and the incompatibility of quantum mechanics with both finite-dimensional spinor fields and Lagrangian dynamics in the context of special relativity. **(80a:81127)**

Davies, E. Brian Symmetry breaking for a nonlinear Schrödinger equation. **(80k:81015)**

Feldman, E. A. *See* **Chavel, I., (80c:58027)**

Fortunato, Donato *See* **Benci, Vieri, (80f:35041a)** *and* **Benci, Vieri, (80f:35041b)**

Geyer, B. (*with* Robaschik, D.; Wieczorek, E.) Theory of deep inelastic lepton-hadron scattering. **(80g:81074)**

Grabmüller, Hans ★Singular perturbation techniques applied to integro-differential equations. **(80k:45015)**

Herbst, I. W. *See* **Avron, J. E.; et al., (80k:35054)**

Hooton, James G. Dirichlet forms associated with hypercontractive semigroups. **(80h:47050)**

Kashiwara, Masaki (*with* Schapira, Pierre) Problème de Cauchy pour les systèmes d'équations différentielles et microdifférentielles dans le domaine complexe. **(80h:58044)**

Loinger, A. *See* **Bocchieri, P., (80j:81041)**

Moržakov, V. V. *See* **Braičev, G. G., (80c:35105)**

Neuberger, J. W. Boundary value problems for systems of nonlinear partial differential equations. **(80i:65109)**

Oročko, Ju. B. Smooth approximation of selfadjoint differential operators in divergence form with measurable bounded coefficients. (Russian) **(80k:35058)**

Parenti, Cesare The hypoellipticity problem. (Italian. English summary) **(80i:35050)**

Robaschik, D. *See* **Geyer, B.; et al., (80g:81074)**

Rosenbloom, P. C. Commutation relations for linear operators in Hilbert space with applications to partial differential equations. I. **(80d:47003)**

Schapira, Pierre *See* **Kashiwara, Masaki, (80h:58044)**

Semenov, Ju. A. On the problem of convergence of a bounded-below sequence of symmetric forms for the Schrödinger operator. **(80j:35080)**

Simon, Barry *See* **Avron, J. E.; et al., (80k:35054)**

Sohr, Hermann Über die Selbstadjungiertheit von Schrödinger-Operatoren. **(80d:35040)**

Vugal'ter, S. A. (*with* Žislin, G. M.) The discrete spectrum of the n-particle quantum system energy operator. (Russian) **(80a:81028)**

Weder, R. A. The unified approach to spectral analysis. II. **(80h:35102)**

Wieczorek, E. *See* **Geyer, B.; et al., (80g:81074)**

Yano, Tamaki On the theory of b-functions. **(80h:32026)**

Žislin, G. M. *See* **Vugal'ter, S. A., (80a:81028)**

47G05 Integral, integro-differential, and pseudodifferential operators [See also 35Sxx, 45P05, 58Gxx.]

Abdullaev, S. K. (*with* Babaev, A. A.) A singular integral with a summable density. (Russian) **80e:47043**

A multidimensional singular operator on the one-point compactification of $\mathbf{R}^m$. (Russian) **80d:47075**

Abramovič, V. S. Semigroups of M. M. Džrbašjan integral operators. (Russian) **80i:47068**

Aleksandrov, E. L. (*with* Kiričenko, B. I.) Spectral functions of Carleman integral operators with kernels that depend on the difference and on the sum of arguments. (Russian) **80b:47060**

Anda, Kenji (*with* Fujiwara, Daisuke) On some oscillatory integral transformations in $L^2(\mathbf{R}^n)$. **80d:47076**

Babaev, A. A. *See* **Abdullaev, S. K., 80e:47043**

Balkarev, P. G. The algebra of singular integral operators with a finite commutative group of shifts on a composite contour. (Russian) **80b:47061**

Beals, Richard Correction to: "Characterization of pseudodifferential operators and applications" (Duke Math. J. **44** (1977), no. 1, 45–57). **80b:47062**

Birman, M. Š. (*with* Solomjak, M. Z.) Application of interpolational methods to estimates of the spectrum of integral operators. (Russian) **80b:47063**

Bogorodskaja, T. E. The density of the states of multidimensional integral operators. (Russian) **80i:47069**

Bokaev, K. H. Pseudodifferential operators with operator symbol. (Russian) **80d:47077**

Bourdaud, Gérard Régularité du commutateur de deux opérateurs pseudo-différentiels peu réguliers. (English summary) **80m:47046**

Coifman, Ronald (*with* Meyer, Yves) Commutateurs d'intégrales singulières et opérateurs multilinéaires. (English summary) **80a:47076**

Cordes, H. O. On pseudodifferential operators and smoothness of special Lie-group representations. **80m:47047**

Costabel, Martin A singular integral operator related to the one-sided Hilbert transformation. **80f:47043**

Deič, V. G. (*with* Korotjaev, E. L.; Jafaev, D. R.) The theory of potential scattering with account taken of spatial anisotropy. (Russian. English summary) **80a:47077**

Fefferman, Charles Louis (*with* Phong, D. H.) On positivity of pseudo-differential operators. **80b:47064**

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Frankfurt, Richard (*with* Rovnyak, James) Recent results and unsolved problems on finite convolution operators. **80a:47078**

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Graham, Ivan G. (*with* Sloan, Ian H.) On the compactness of certain integral operators. **80j:47059**

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Hörmander, Lars The Weyl calculus of pseudodifferential operators. **80j:47060**

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Kakičev, V. A. A generalized Riemann operator with several projectors. (Russian) **80a:47080**

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Kiselev, V. Ju. Almost periodic Fourier integral operators and hyperbolic equations in spaces of almost periodic functions. (Russian) **80i:47071**

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Kotjar, B. D. Singular numbers of integral operators. (Russian) **80d:47078**

Kresin, G. I. (*with* Maz'ja, V. G.) The essential norm of an operator of the double-layer potential type in the space C_m. (Russian) **80b:47065**

Kumano-go, Hitoshi (*with* Nagase, Michihiro) Pseudo-differential operators with non-regular symbols and applications. **80b:47066**

Lerner, Nicolas Sur les espaces de Sobolev généraux associés aux classes récentes d'opérateurs pseudo-différentiels. (English summary) **80k:47055**

(Love, E. R.) *See* **Fehér, Franziska, 80c:47041**

Malamud, M. M. Perturbations of the operator of fractional integration. (Russian) **80j:47061**

Maz'ja, V. G. Local square summability of a convolution. (Russian. English summary) **80a:47081**

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Meyer, Yves Sharp estimates for pseudodifferential operators. **80m:47048**

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Phong, D. H. *See* **Fefferman, Charles Louis, 80b:47064**

Pilidi, V. S. (*with* Sazonov, L. I.) Bisingular integral operators in spaces of Hölder functions. (Russian) **80h:47056**

Plamenevskiĭ, B. A. On the algebra of pseudo-differential operators in spaces with weight norms. (Russian) **80a:47082**

Plazzi, Piero An L^2-continuity theorem for certain pseudodifferential operators. (Italian. English summary) **80f:47044**

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Solov'ev, A. A. Continuity in L^p of the integral operator with a Bergman kernel. (Russian. English summary) **80f:47045**

Sourour, A. R. Pseudo-integral operators. **80k:47056**

Stepanov, V. D. Convolution integral operators. (Russian) **80e:47042**

Šubin, M. A. ★Псевдодифференциальные операторы и спектральная теория. (Russian) [Pseudodifferential operators and spectral theory] **80b:47057**

Sunder, Vlakalathur Shankar Two characterization theorems for integral operators. **80d:47079**

Szeptycki, Paweł Domains of integral transformations on general measure spaces. **80k:47058**

Unterberger, André Sur la continuité L^2 des opérateurs pseudo-différentiels. (English summary) **80c:47043**

Vinogradov, S. A. Continuity of perturbed integral operators, Cauchy type integrals, maximal operators. (Russian. English summary) **80a:47083**

Widom, Harold Spectral asymptotics of hypersurfaces. **80d:47080**

Zanichelli, Maria Camilla A class of pseudodifferential operators. (Italian. English summary) **80g:47055**

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Abdymanapov, S. A. Boundedness of some integral operators in fractional spaces. (Russian) **(80b:45022)**

Alvarez Alonso, Josefina On the inversion of pseudodifferential operators. **(80f:58043)**

Antonec, M. A. Classical limit of the Weyl quantization. (Russian. English summary) **(80e:81027)**

Belleni-Morante, A. An integro-differential equation arising from the theory of heat

conduction in rigid materials with memory. (Italian summary) (80c:73008)

Bruyant, Francine Estimations pour la composition d'un grand nombre d'opérateurs pseudo-différentiels d'ordre 0 et une application. (English summary) (80k:58093)

Bulgeim, A. L. Volterra operator equations in scales of Banach spaces. (Russian) (80k:47012)

Coutabel, Martin A contribution to the theory of singular integral equations with Carleman shift. (80i:45008)

Danilov, V. G. Estimates for a pseudodifferential canonical operator with a complex phase. (Russian) (80b:58057)

Deundjak, V. M. Homotopy classification of Noetherian systems of multidimensional bisingular integral operators. (Russian) (80j:47041)

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Duggal, B. P. Functional equations and linear transformations. IV. Interpolation. (80a:39009)

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Dynin, Alexander Inversion problem for singular integral operators: C^*-approach. (80c:46066)

Fridlender, L. F. Analytic perturbations of selfadjoint analytic elliptic pseudodifferential operators. (Russian) (80a:47022)

Friedland, Shmuel Extremal eigenvalue problems defined for certain classes of functions. (80c:49034)

Glebov, A. V. (*with* Deundjak, V. M.) Homotopy classification of Noetherian systems of singular and bi-singular integral equations with discontinuous coefficients. (Russian) (80c:45002)

Halmos, Paul Richard (*with* Sunder, Viakalathur Shankar) ★Bounded integral operators on L^2 spaces. (80g:47036)

Janson, Svante Mean oscillation and commutators of singular integral operators. (80j:42034)

Johnson, W. B. (*with* König, Hermann; Maurey, Bernard; Retherford, J. R.) Eigenvalues of p-summing and l_p-type operators in Banach spaces. (80i:47033)

Karlovič, Ju. I. (*with* Kravčenko, V. G.) Integro-functional equations with non-Carleman shift in the space $L_2^2(0, 1)$. (Russian) (80j:47046)

Kilbas, A. A. Integral operators with logarithmic kernels on the totality of segments of the real axis. (Russian) (80d:45006)

Komlenko, Ju. V. Nonlinear Volterra integral equations with a nonmonotone operator which have positive solutions. (Russian) (80h:45002)

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Kostjučenko, A. G. (*with* Škalikov, A. A.) Summability of expansions in eigenfunctions of differential operators and of convolution operators. (Russian) (80d:34017)

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Lesmer, Lawrence Lattice properties of integral operators. (80a:47045)

Maurey, Bernard *See* **Johnson, W. B.; et al.,** (80i:47033)

Menikhes, L. D. The regularizability of mappings that are inverse to integral operators. (Russian) (80k:47034)

Meyer, Yves Nouvelles estimations pour les opérateurs pseudo-différentiels. (80a:35119)

Otelbaev, M. (*with* Suvorčenkova, G. A.) A necessary and sufficient condition of boundedness and continuity for a class of Uryson operators. (Russian) (80g:47080)

Patissier, Guy Sur les fonctions d'un opérateur pseudo-différentiel elliptique. (80g:35129)

Phong, D. H. On integral representations for the Neumann operator. (80k:32038)

Pietsch, Albrecht Eigenvalues of integral operators. (Russian) (80k:47023)

Pincus, Joel D. Symmetric singular integral operators with arbitrary deficiency. (80f:45024)

Plíšek, Józef On integral equations in a Banach space. (80g:45003)

Plamenevskiĭ, B. A. Meromorphic pseudodifferential operator-valued functions. (Russian) (80i:35186)

Popivanov, P. R. Local properties of pseudodifferential operators with multiple characteristics. (Russian) (80m:35082)

Power, Stephen Hankel operators with PQC symbols and singular integral operators. (80a:47040)

Prößdorf, Siegfried ★Some classes of singular equations. (80d:47044)

Rempel, Stephan (*with* Schulze, B.-W.) ★Elliptische Operatoren auf berandeten Mannigfaltigkeiten. (80a:58037)

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Robert, Didier Propriétés spectrales d'opérateurs pseudo-différentiels. (80k:35112)

Rozenbljum, G. V. Near-similarity of operators and the spectral asymptotic behavior of pseudo-differential operators on the circle. (Russian) (80m:47024)

Šaroglazov, V. S. The branching of eigenvalues of a boundary value problem for a class of linear integro-differential equations. (Russian) (80k:45001)

Schep, A. R. Kernel operators. (80f:47028)

Schneider, Claus Regularity of the solution to a class of weakly singular Fredholm integral equations of the second kind. (80f:45002)

Schochetman, Irwin E. Kernels and integral operators for continuous sums of Banach spaces. (80a:47046)

Schulze, B.-W. *See* **Rempel, Stephan,** (80a:58037)

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Sunder, Viakalathur Shankar Absolutely bounded matrices. (80d:47052)

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Unterberger, André Encore des classes de symboles. (80i:58038)

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Zaldman, Samuel Some inequalities for Kohn-Nirenberg pseudo-differential operators. (80c:35107)

47Hxx Nonlinear operators {For global and geometric aspects, see 58–XX, especially 58Cxx.}

Jeggle, Hansgeorg ★Nichtlineare Funktionalanalysis. 80k:47057

Langenbach, Arno ★Monotone Potentialoperatoren in Theorie und Anwendung. 80d:47081

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(Kluge, Reinhard) *See* **Theory of nonlinear operators,** (80d:47002)

Reich, Simeon A random fixed-point theorem for set-valued mappings. (Italian summary) (80h:60084)

Zeidler, Eberhard ★Vorlesungen über nichtlineare Funktionalanalysis. III. (80g:49001)

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Nonlinear operators *See* **Theory of nonlinear operators,** (80d:47002)

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Theory of nonlinear operators ★Theory of nonlinear operators. (80d:47002)

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Bouchitte, Guy Maximale monotonie et pseudomonotonie renforcées de l'opérateur de Nemickiĭ associé au sous-différentiel d'un intégrande convexe normal. 80b:47067

Brézis, Haïm (*with* Lions, Pierre-Louis) Produits infinis de résolvantes. (English summary) 80b:47068

Browder, Felix E. Image d'un opérateur maximal monotone et principe de Landesman-Lazer. (English summary) 80b:47069

Sur l'image d'opérateurs maximaux monotones. (English summary) 80b:47070

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Minty, George J. On variational inequalities for monotone operators. I. 80c:47045

Moroşanu, Gheorghe Second-order difference equations of monotone type. 80b:47060

Mustonen, Vesa A class of strongly nonlinear variational inequalities. 80a:47085

Naumann, Joachim (*with* Wulst, M.) On evolution inequalities of Bingham type in three dimensions. I. 80g:47058

Pavlenko, V. N. Nonlinear equations with discontinuous operators in Banach spaces. (Russian) 80k:47059

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The range of sums of accretive and monotone operators. 80g:47060

Taraĭdar, E. (*with* Thompson, H. B.) On Ky Fan's minimax principle. 80a:47086

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Trubnikov, Ju. V. Accretive differential equations. (Russian) 80m:47049

Weyer, Jürgen Über maximale Monotonie von Operatoren des Typs $L^*\Phi \circ L$. (English summary) 80m:47050

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Zlai, Eliahu Approximation et surjectivité d'opérateurs de type monotone. (English summary) 80b:47071

Surjectivité dans les espaces en dualité. 80d:47082

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Barbu, Viorel (*with* Malik, M. A.) Semilinear integro-differential equations in Hilbert space. (80e:45017)

Existence for nonlinear Volterra equations in Hilbert spaces. (80e:45011)

Bernfeld, Stephen R. (*with* Lakshmikantham, V.) Monotone methods for nonlinear boundary value problems in Banach spaces. (80i:34100)

Brézis, Haïm (*with* Browder, Felix E.) Strongly nonlinear elliptic boundary value problems. (80d:35061)

Browder, Felix E. *See* **Brézis, Haïm,** (80d:35061)

Doležal, Václav Solvability of a class of Hilbert networks. (80d:94028)

Linearization of monotone Hilbert networks. (80d:94029)

Optimal linearization of equations involving monotone operators. (80g:47074)

Gripenberg, Gustaf An existence result for a nonlinear Volterra integral equation in a Hilbert space. (80c:45016)

Gwinner, Joachim On the existence and approximation of solutions of pseudomonotone variational inequalities. (80f:49005)

On the regularization of monotone variational inequalities. (80d:65072)

Zur schwachen Unterhalbstetigkeit nichtlinearer Funktionale. (80c:49003)

Hanouzet, Bernard (*with* Joly, Jean-Luc) Convergence uniforme des itérés définissant la solution d'une inéquation quasi variationnelle abstraite. (English summary) (80a:35032)

Joly, Jean-Luc *See* **Hanouzet, Bernard,** (80a:35032)

Kiffe, Thomas (*with* Stecher, Michael) L^2 solutions of Volterra integral equations. (80c:45005)

Kluge, Reinhard (*with* Langmach, Hartmut) On the determination of some rheologic properties of mechanical media. (80g:73039)

Kravvaritis, Dimitrios Nonlinear equations and inequalities in Banach spaces. (80h:47069)

Lakshmikantham, V. *See* **Bernfeld, Stephen R.,** (80i:34100)

Langmach, Hartmut *See* **Kluge, Reinhard,** (80g:73039)

Levitan, B. M. (*with* Žikov, V. V.) ★Почти-периодические функции и

дифференциальные уравнения. (Russian) [Almost-periodic functions and differential equations] (80d:42010)
Malik, M. A. *See* **Barbu, Viorel,** (80e:45017)
Matahashi, Tomomi (*with* Tsutsumi, Masayoshi) Periodic solutions of semilinear pseudoparabolic equations in Hilbert space. (80j:34085)
Meikman, Avraham A. (*with* Micchelli, Charles A.) Spline spaces are optimal for L^2 n-width. (80d:41013)
Micchelli, Charles A. *See* **Meikman, Avraham A.,** (80d:41013)
Moroşanu, Gheorghe Asymptotic behaviour of solutions of differential equations associated to monotone operators. (80m:34064)
Platone Garroni, Maria Giovanna (*with* Troianiello, Giovanni Maria) Some regularity results and a priori estimates for solutions of variational and quasi-variational inequalities. A survey. (80g:35060)
Portnov, V. R. Solvability of nonlinear operator equations in Banach spaces. Applications to the solution of certain problems of the theory of differential equations. (Russian) (80m:47061)
Rjazanceva, I. P. The Galerkin method for the solution of equations with discontinuous monotone operators. (Russian) (80e:47054)
Stecher, Michael *See* **Kiffe, Thomas,** (80c:45005)
Troianiello, Giovanni Maria *See* **Platone Garroni, Maria Giovanna,** (80g:35060)
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Wakulicz, Andrzej Numerical methods for solving variational inequalities. (80c:65127)
Yamada, Yoshio Note on certain nonlinear evolution equations of second order. (80b:34074)
Žikov, V. V. *See* **Levitan, B. M.,** (80d:42010)

47H06 Accretive operators, dissipative operators, etc.

Bruck, Ronald E. (*with* Passty, Gregory B.) Almost convergence of the infinite product of resolvents in Banach spaces. 80e:47044
Downing, David Surjectivity results for ϕ-accretive set-valued mappings. 80c:47046
Kartsatos, Athanassios G. On the equation $Tx = y$ in Banach spaces with weakly continuous duality maps. 80k:47060
Perturbations of M-accretive operators and quasi-linear evolution equations. 80b:47072
Passty, Gregory B. *See* **Bruck, Ronald E.,** 80e:47044
Ray, William O. Zeros of accretive operators defined on unbounded sets. 80d:47083
An elementary proof of surjectivity for a class of accretive operators. 80m:47051

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Angelov, V. G. (*with* Bainov, D. D.) Existence and uniqueness of the solution of nonlinear functional equations in the space L^p. (Russian. Kazakh summary) (80m:39003)
Bainov, D. D. *See* **Angelov, V. G.,** (80m:39003)
Da Prato, Giuseppe (*with* Iannelli, Mimmo; Tubaro, Luciano) Dissipative functions and finite-dimensional stochastic differential equations. (80c:60075)
Haudidier, Dominique Processus non commutatifs dans $A(K)$. (English summary) (80m:46058)
Iannelli, Mimmo *See* **Da Prato, Giuseppe; et al.,** (80c:60075)
Ichikawa, Akira (*with* Pritchard, Anthony J.) Existence, uniqueness, and stability of nonlinear evolution equations. (80j:34079)
Itoh, Shigeru Random differential equations associated with accretive operators. (80b:60085)
Nevanlinna, Olavi (*with* Reich, Simeon) Strong convergence of contraction semigroups and of iterative methods for accretive operators in Banach spaces. (80e:47057)
Oka, Yuzo Nonlinear accretive mappings in Banach spaces: the solvability and a solution algorithm. (80j:47082)
Pritchard, Anthony J. *See* **Ichikawa, Akira,** (80j:34079)
Reich, Simeon The range of sums of accretive and monotone operators. (80g:47060)
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47H07 Monotone and positive operators on ordered Banach spaces or other ordered topological vector spaces

Krasnosel'skiĭ, M. A. (*with* Pokrovskiĭ, A. V.) Continuity points of monotone operators. (Russian) 80k:47061
Kunisch, Karl (*with* Schappacher, Wilhelm) Order-preserving evolution operators of functional differential equations. (Italian summary) 80m:47052
Kutateladze, S. S. Convex operators. (Russian) 80m:47053
Leggett, Richard W. (*with* Williams, Lynn R.) Multiple positive fixed points of nonlinear operators on ordered Banach spaces. 80i:47073
Neumann, Michael Continuity of sublinear operators of F-spaces. 80c:47047
Opaicev, V. I. Generalization of the theory of monotone and concave operators. (Russian) 80i:47074
Pokrovskiĭ, A. V. *See* **Krasnosel'skiĭ, M. A.,** 80k:47061
Schappacher, Wilhelm *See* **Kunisch, Karl,** 80m:47052
Vos, Heinrich Existence and bounds for positive solutions of superlinear Uryson equations. 80i:47075
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Secondary classifications:

Bakušinskiĭ, A. B. On the principle of iterative regularization. (Russian) (80m:65045)
Borsdyko, V. L. Bifurcation of positive periodic states (the subfurcation phenomenon). (Russian. Tajiki summary) (80j:58024)
Doležal, Václav Feedback systems described by monotone operators. (80m:93032)
Grabmüller, Hans ★Singular perturbation techniques applied to integro-differential equations. (80k:45015)

Petryshyn, Walter V. Existence of nonzero fixed points for noncompact mappings in wedges and cones. (80i:47077)
Thieme, Horst R. On a class of Hammerstein integral equations. (80i:45015)

47H09 Nonexpansive mappings, ultimately compact mappings, K-set contractions, etc.

Hirano, Norimichi (*with* Takahashi, Wataru) Nonlinear ergodic theorems for nonexpansive mappings in Hilbert spaces. 80j:47064
Kobayasi, Kazuo On the asymptotic behavior of iterates of nonexpansive mappings in uniformly convex Banach spaces. 80g:47061
Machado, Hilton V. Convergence of successive approximations—nonexpansive mappings. 80i:47076
Massabò, Ivar (*with* Stuart, Charles A.) Positive eigenvectors of k-set contractions. 80b:47073
Petryshyn, Walter V. Existence of nonzero fixed points for noncompact mappings in wedges and cones. 80i:47077
Singh, B. P. (*with* Singh, Kanhaya L.) Quasinonexpansive mappings and common fixed points. 80h:47061
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Wolf, Rudolf Approximation of fixed points of condensing mappings. 80i:47079

Secondary classifications:

Blebea, Dan (*with* Dincă, George) Remarque sur une méthode de contraction à minimiser les fonctionnelles convexes sur les espaces de Hilbert. (English summary) (80k:49012)
Dincă, George *See* **Blebea, Dan,** (80k:49012)
Goebel, K. (*with* Kuczumow, T.) Irregular convex sets with fixed-point property for nonexpansive mappings. (80j:47068)
Kuczumow, T. *See* **Goebel, K.,** (80j:47068)
Petryshyn, Walter V. Nonlinear eigenvalue problems and the existence of nonzero fixed points for A-proper mappings. (80j:47076)

47H10 Fixed-point theorems [See also 34C29, 54H25, 55M20, 58C30.]

Abts, Dietmar (*with* Reinermann, Jochen) A fixed point theorem for holomorphic mappings in locally convex spaces. 80g:47062
Achari, J. Fixed points for a class of mappings. (Italian summary) 80k:47062
Anzai, Kazuo (*with* Ishikawa, Shiro) Addendum to our paper: "On common fixed points for several continuous affine mappings" (Pacific J. Math. 72 (1977), no. 1, 1–4). 80d:47085
Babylev, N. A. An approximation method for introducing rotation for certain classes of continuous vector fields. (Russian) 80j:47065
Brown, D. R. (*with* O'Malley, M. J.) A fixed-point theorem for certain operator valued maps. 80h:47062
Bruck, Ronald E. A simple proof of the mean ergodic theorem for nonlinear contractions in Banach spaces. 80j:47066
Butler, G. J. Almost all 1-set contractions have a fixed point. 80d:47086
Cheng, Fang Chih On the Mann iteration process in a uniformly convex Banach space. 80a:47087
Daher, S. J. On a fixed point principle of Sadovskiĭ. 80c:47048
Fixed point theorems for nonlinear operators with a sequential condition. 80d:47087
Dáng Dình Áng (*with* Le Hoan Hoa) On triangle contractive operators in Hilbert spaces. 80h:47063
De Blasi, F. S. Some generic properties in fixed point theory. 80j:47067
Delbosco, Domenico Un théorème de point fixe dans les espaces de Banach réflexifs. (Italian summary) 80g:47063
Dunn, J. C. A relaxed Picard iteration process for set-valued operators of the monotone type. 80f:47047
Dybov, G. P. Introduction of rotation for a class of many-valued operators. (Russian) 80k:47063
Edelstein, Michael (*with* O'Brien, Richard C.) Nonexpansive mappings, asymptotic regularity and successive approximations. 80b:47074
Frum-Ketkov, R. L. Mappings in a Banach space. (Russian) 80f:47048
Gatica, Juan A. *See* **Nguyên Phuong Các,** 80j:47071
Goebel, K. (*with* Kuczumow, T.) Irregular convex sets with fixed-point property for nonexpansive mappings. 80j:47068
Goldstein, Jerome A. (*with* Knill, Ronald J.) Fixed-point theorems involving radial compactness and angle conditions. 80f:47049
Hadžić, Olga A fixed-point theorem for mappings with a ϕ-densifying iteration in locally convex spaces. 80f:47050
Fixed point theorems for multivalued mappings in locally convex spaces. 80g:47064
A fixed-point theorem in probabilistic locally convex spaces. 80e:47045
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Golubitsky, Martin (*with* Schaeffer, David G.) A theory for imperfect bifurcation via singularity theory. **(80j:58061)**

Graff, Richard A. *See* **Dorroh, J. R., (80j:34077)**

Gripenberg, Gustaf On some integral and integro-differential equations in a Hilbert space. **(80f:45022)**

On an abstract integral equation. **(80f:45005)**

Gröger, Konrad Evolution equations in the theory of plasticity. **(80f:73024)**

Gupta, Chaitan P. *See* **Calvert, Bruce D., (80i:35083)**

Hale, Jack K. Bifurcation with several parameters. **(80d:58012)**

Hromova, L. N. Classes of multistep iteration methods for solving operator equations. (Russian) **(80d:65066)**

Karčevskiĭ, M. M. *See* **Ljaiko, A. D.; et al., (80e:65059)**

Keener, James P. Secondary bifurcation and multiple eigenvalues. **(80j:58025)**

Kielhöfer, Hansjörg Bifurcation of periodic solutions for a semilinear wave equation. **(80j:35007)**

Generalized Hopf bifurcation in Hilbert space. **(80k:58037)**

Kluge, Reinhard On some parameter determination problems in variational and quasivariational inequalities. I. **(80m:49009)**

Küpper, Tassilo (*with* Riemer, Dieter) Necessary and sufficient conditions for bifurcation from the continuous spectrum. **(80k:58038)**

Kurčatov, V. A. Conditions for the convergence of a linearization method. (Russian) **(80a:65122)**

Landes, Rüdiger Two existence theorems for nonlinear elliptic equations. **(80h:35060)**

Lev, Avshalom Branching of solutions of equations in Banach spaces without multiplicity assumptions. **(80a:58016)**

Lin, S. S. *See* **Brown, K. J., (80i:35082)**

Liskovec, O. A. The principle of smoothing functional in the regularization of equations with a closed operator. (Russian) **(80a:65109)**

Ljapin, L. N. *See* **Bulgakov, A. I., (80j:45020)**

Ljaiko, A. D. (*with* Badriev, I. B.; Karčevskiĭ, M. M.) The variational method for equations with monotone discontinuous operators. (Russian) **(80e:65059)**

Loginov, B. V. Problems of bifurcation theory that are invariant with respect to the group of motions of R^r. (Russian. Uzbek summary) **(80g:58022a)**

Letter to the editors: "Problems of bifurcation theory that are invariant with respect to the group of motions of R^r" (Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1978, no. 3, 20–23). (Russian) **(80g:58022b)**

Marcus, Moshe (*with* Mizel, Victor J.) Complete characterization of functions which act, via superposition, on Sobolev spaces. **(80j:46055)**

Mel'nikov, V. K. Equations that are generated by an operator relation. (Russian) **(80d:35139)**

Miersemann, Erich *Über höhere Verzweigungspunkte nichtlinearer* Variationsungleichungen. **(80e:58014)**

Milani, Albert On a variational inequality with time dependent convex constraints for the Maxwell equations. (Italian summary) **(80d:49012)**

Mizel, Victor J. *See* **Marcus, Moshe, (80j:46055)**

Morales, Claudio Pseudocontractive mappings and the Leray-Schauder boundary condition. **(80k:47067)**

Müller, Manfred W. (*with* Naumann, Joachim) On evolution inequalities of a modified Navier-Stokes type. II. (Czech summary) **(80a:35103)**

Mustonen, Vesa A class of strongly nonlinear variational inequalities in unbounded domains. **(80g:35058)**

Nakao, Mitsuhiro *A difference inequality and its application to nonlinear evolution* equations. **(80b:34079)**

Naumann, Joachim *See* **Müller, Manfred W., (80a:35103)**

Nevanlinna, Olavi *A note on semidiscretization methods.* **(80a:65111)**

Nohel, John A. An abstract nonlinear Volterra equation. **(80b:45025)**

Nowak, Andrzej Random solutions of equations. **(80i:60089)**

Nürnberg, Reiner On the determination of functional parameters in nonlinear evolution equations of the Navier-Stokes type. **(80h:35110)**

Oden, J. Tinsley *Existence theorems for a class of problems in nonlinear elasticity.* **(80e:73019)**

Potier-Ferry, Michel Bifurcation et stabilité pour des systèmes dérivant d'un potentiel. *(English summary)* **(80e:58015)**

Prüss, Jan On semilinear evolution equations in Banach spaces. **(80i:34107)**

Rabinowitz, Paul H. *See* **Benci, Vieri, (80i:58019)**

Rennolet, Charles *Existence and boundedness of solutions of abstract nonlinear* integro-differential equations of nonconvolution type. **(80h:45013)**

Riemer, Dieter *See* **Küpper, Tassilo, (80k:58038)**

Rosca, Ioan *See* **Dincă, George, (80a:35026)**

Rothe, Franz Solutions for systems of nonlinear elliptic equations with nonlinear boundary conditions. **(80j:35036)**

Sattinger, D. H. Group-theoretic methods in bifurcation theory. **(80i:58021)**

Bifurcation from rotationally invariant states. **(80j:58027)**

Schaeffer, David G. *See* **Golubitsky, Martin, (80j:58061)**

Schneider, K. R. Zur Konvergenzbeschleunigung bei Summen strikt kontraktiver Operatoren. (English and Russian summaries) **(80a:65123)**

Über die Anwendung der Funktionalisierungsmethode bei nichtlinearen Eigenwertproblemen. **(80k:47079)**

Sljusarčuk, V. E. Bounded solutions of nonlinear almost periodic discrete systems. (Russian. English summary) **(80i:39013)**

Staffans, Olof J. An asymptotic problem for a positive definite operator-valued Volterra kernel. **(80b:45003)**

On the asymptotic behavior of finite energy solutions of an abstract integral equation. **(80b:45004)**

Vainikko, G. *Approximative methods for nonlinear equations (two approaches to the* convergence problem). **(80a:65115)**

Ward, James R., Jr. Periodic solutions of perturbed conservative systems. **(80b:34045)**

Webb, G. F. Abstract Volterra integro-differential equations and a class of reaction-diffusion equations. **(80j:45018)**

Wegner, Bernd *Ein globales Ergebnis für Bifurkationsaufgaben mit schwach* differenzierbaren Operatoren. **(80h:58020)**

Wolfe, M. A. Extended iterative methods for the solution of operator equations. **(80a:65126)**

Yorke, James A. *See* **Alexander, J. C., (80a:58014)**

47H17 Methods for solving equations involving nonlinear operators {For numerical analysis, see 65J15.}

Balázs, Martin On the method of the chords and Steffensen's method in bounded regions in Banach spaces. **80i:47087**

Bellman, Richard E. Monotone operators and nonlinear equations. **80e:47052**

Conjura, E. (*with* Petryshyn, Walter V.) Extension of nonlinear densely defined operators, rates of convergence for the error and the residual, and application to differential equations. **80c:47056**

Fam Kĭ An' An approximate method of solving quasilinear operator equations. (Russian) **80m:47064**

Fonarev, A. A. The solution of nonlinear equations with monotone transformations. (Russian) **80i:47088**

Gordienko, E. I. Computational errors and the convergence of iteration processes for the solution of operator equations. (Russian) **80c:47057**

Gripenberg, Gustaf On a nonlinear Volterra integral equation in a Banach space. **80f:47058**

Gröger, Konrad On the solution of a class of equations with monotone operators by iteration and projection-iteration. **80c:47058**

Discrete-time Galerkin methods for nonlinear evolution equations. **80e:47053**

Gukovskiĭ, S. A. Regularization of the construction of simple solutions of nonlinear equations of the first kind in the neighborhood of a bifurcation point. (Russian) **80k:47077**

Hurodze, T. A. Iteration processes for split operators. (Russian. Georgian and English summaries) **80f:47059**

Jeggle, Hansgeorg Existence and discrete approximation of bifurcation points. **80a:47102**

Jerome, Joseph W. Existence and approximation of weak solutions of nonlinear Dirichlet problems with discontinuous coefficients. **80d:47097**

Kaplan, James L. (*with* Yorke, James A.) Numerical solution of a generalized eigenvalue problem for even mappings. **80k:47078**

Kratochvíl, Alexander (*with* Nečas, Jindřich) Secant modulus method for the construction of a solution of nonlinear eigenvalue problems. (Italian summary) **80f:47089**

Melelko, V. I. The convergence rate of perturbed iteration methods for determination of L-generalized solutions to nonlinear operator equations. (Russian) **80a:47103**

Mironov, A. V. *See* **Vahidov, Š., 80k:47080**

Morozov, V. A. Regular methods for the solution of nonlinear operator equations. (Russian) **80b:47091**

Nečas, Jindřich *See* **Kratochvíl, Alexander, 80f:47089**

Pârâlescu, Ion Une variante de la méthode de Newton. **80g:47078**

Petryshyn, Walter V. *See* **Conjura, E., 80c:47056**

Rjazanceva, I. P. The Galerkin method for the solution of equations with discontinuous monotone operators. (Russian) **80e:47054**

On the question of the solution of nonlinear equations with discontinuous monotone operators. (Russian) **80e:47055**

Schaefer, K. R. Über die Anwendung der Funktionalisierungsmethode bei nichtlinearen Eigenwertproblemen. **80k:47079**

Seikkala, Seppo On the method of successive approximations for nonlinear equations in spaces of continuous functions. **80a:47104**

Sen, Rabindranath On the iterative process of solving nonlinear operator equations in PTL-spaces. **80a:47105**

Vahidov, Š. (*with* Mironov, A. V.) Conditions for convergence of an iteration process for an operator equation in a locally compact space. (Russian) **80k:47080**

Yorke, James A. *See* **Kaplan, James L., 80k:47078**

Secondary classifications:

Altman, Mieczysław *A strategy theory of solving equations.* **(80b:65078)**

Balázs, Martin Notes on the convergence of the method of chords and of Steffensen's method in Banach spaces. (Romanian summary) **(80c:65123)**

Cesari, Lamberto (*with* McKenna, P. J.) Alternative problems and Grothendieck approximation properties. **(80c:47053)**

Chow, Shui Nee (*with* Mallet-Paret, John; Yorke, James A.) A homotopy method for locating all zeros of a system of polynomials. **(80k:58012)**

Deuflhard, P. (*with* Heindl, G.) Affine invariant convergence theorems for Newton's method and extensions to related methods. **(80f:65068)**

Fan Kĕ An' Projection-iteration methods for solving operator equations. (Russian) **(80k:65054)**

Fruhe, Jens *Landesman-Lazer-alternative theorems for a class of nonlinear functional equations.* **(80d:47091)**

Grebennikov, A. I. Optimal methods of solution of nonlinear ill-posed problems. (Russian) **(80e:65058)**

den Heijer, C. ★The numerical solution of nonlinear operator equations by imbedding methods. **(80k:65055)**

Heindl, G. *See* **Deuflhard, P., (80f:65068)**

Knopova, S. M. (*with* Savelova, T. I.) Application of projection methods to solving unstable problems. (Russian) **(80f:65069)**

Kwapisz, Marian (*with* Turo, Jan) On the existence and uniqueness of integrable solutions of functional equations in a Banach space. **(80i:39012)**

Liu, Qun *Some problems concerning approximate solutions of operator equations.* (Chinese. English summary) **(80k:65056)**

Liskovec, O. A. The principle of a smoothing functional in the projection method of finding regularized solutions for equations of the first kind. (Russian) **(80g:65070)**

Madorskiĭ, V. M. (*with* Silaev, N. V.) A hyperlinear process for the solution of nonlinear equations. (Russian. English summary) **(80b:65080)**

Mallet-Paret, John *See* **Chow, Shui Nee; et al., (80k:58012)**

Matshashi, Tomomi *See* **Tsutsumi, Masayoshi, (80h:34083)**

McKenna, P. J. *See* **Cesari, Lamberto, (80c:47053)**

Migovič, F. M. *See* **Zlepko, P. P., (80b:65066)**

Petryshyn, Walter V. On the solvability of nonlinear equations involving abstract and differential operators. **(80c:65126)**

Phan Van Hap Application of generalized quadrature formulas to the approximate solution of operator equations. (Russian) **(80f:65067)**

Sapagovas, Mifodijus The alternately-triangular method for the solution of problems with a nonlinear or nonselfadjoint operator. (Russian. Lithuanian and English summaries) **(80b:65081)**

Savelova, T. I. *See* **Knopova, S. M., (80f:65069)**

Silaev, N. V. *See* **Madorskiĭ, V. M., (80b:65080)**

Simonov, I. V. A moving load on a layer of an ideally contracting material. (Russian) **(80k:73029)**

Tanana, V. P. Approximate solution of implicit operator equations of the first kind by the regularization method. (Russian) **(80e:65060)**

Tekchow, Gerhard On an iteration procedure. **(80f:65070)**

Tsutsumi, Masayoshi (*with* Matahashi, Tomomi) On some nonlinear pseudoparabolic equations. **(80h:34083)**

Turo, Jan *See* **Kwapisz, Marian, (80i:39012)**

Vahidov, Š. Some iterative methods for solving operator equations in locally convex spaces. (Russian) **(80j:65023)**

Yorke, James A. *See* **Chow, Shui Nee; et al., (80k:58012)**

Zlepko, P. P. (*with* Migovič, F. M.) Application of the modification of the Newton-Kantorovič method for the approximate construction of implicit functions. (Russian) **(80b:65066)**

47H20 Semigroups of nonlinear operators [See also 58D07.]

Ballon, Jean-Bernard Générateurs et semi-groupes dans les espaces de Banach uniformement lisses. (English summary) **80i:47090**

Brézis, Haim *Asymptotic behavior of some evolution systems.* **80f:47060**

Goldstein, Jerome A. Nonlinear semigroups and nonlinear partial differential equations. **80c:47056**

Gripenberg, Gustaf *On the asymptotic behaviour of nonlinear contraction semigroups.* **80m:47065**

Kato, Toslo Trotter's product formula for some nonlinear semigroups. **80f:47061**

Kobayashi, Yoshikazu *A remark on convergence of nonlinear semigroups.* **80g:47079**

Nevanlinna, Olavi (*with* Reich, Simeon) Strong convergence of contraction semigroups and of iterative methods for accretive operators in Banach spaces. **80e:47057**

Pazy, A. Strong convergence of semigroups of nonlinear contractions in Hilbert space. **80j:47087**

The asymptotic behaviour of semigroups of nonlinear contractions having large sets of fixed points. **80b:47092**

Pierre, Michel Invariant closed subsets for nonlinear semigroups. **80b:47093**

Reich, Simeon *See* **Nevanlinna, Olavi, 80e:47057**

Schöneberg, Rainald Weak convergence of trajectories of nonexpansive semigroups in Hilbert space. **80m:47066**

Takahashi, Tadayasu *Semigroups of nonlinear operators and invariant sets.* **80m:47067**

Véron, Laurent Équations non linéaires avec conditions aux limites de type Sturm-Liouville. **80j:47088**

Secondary classifications:

Bruck, Ronald E. (*with* Passty, Gregory B.) Almost convergence of the infinite product of resolvents in Banach spaces. **(80e:47044)**

Burch, B. C. (*with* Goldstein, Jerome A.) Nonlinear semigroups and a problem in heat conduction. **(80d:35079)**

Crandall, Michael G. Ordinary differential equations in infinite dimensions and accretive operators. **(80e:34046)**

Goldstein, Jerome A. *See* **Burch, B. C., (80d:35079)**

Hirano, Norimichi (*with* Takahashi, Wataru) Nonlinear ergodic theorems for nonexpansive mappings in Hilbert spaces. **(80j:47064)**

Ichikawa, Akira (*with* Pritchard, Anthony J.) Existence, uniqueness, and stability of nonlinear evolution equations. **(80j:34079)**

Kunisch, Karl (*with* Schappacher, Wilhelm) Order-preserving evolution operators of functional differential equations. (Italian summary) **(80m:47052)**

Passty, Gregory B. *See* **Bruck, Ronald E., (80e:47044)**

Pritchard, Anthony J. *See* **Ichikawa, Akira, (80j:34079)**

Reddien, G. W. (*with* Webb, G. F.) Numerical approximation of nonlinear functional differential equations with L^2 initial functions. **(80e:65156)**

Schappacher, Wilhelm *See* **Kunisch, Karl, (80m:47052)**

Takahashi, Wataru *See* **Hirano, Norimichi, (80j:47064)**

Webb, G. F. *See* **Reddien, G. W., (80e:65156)**

47H99 None of the above, but in this section

Alò, Richard A. (*with* de Korvin, André; Vo Van Tho) Nonlinear integration on L^p-spaces. **80d:47098**

(*with* Alvager, T.; de Korvin, André) A nonlinear integral and a bang-bang theorem. **80k:47081**

Alvager, T. *See* **Alò, Richard A.; et al., 80k:47081**

Antonovskiĭ, E. Ja. Proper mappings of linear topological spaces. (Russian) **80k:47082**

Babin, A. V. Fractional powers of a nonlinear analytic differential operator. (Russian) **80k:47083**

Bahri, Abbas (*with* Morel, Jean-Michel) Image de la somme de deux opérateurs. (English summary) **80b:47094**

Batt, J. (*with* Hiermeyer, W.) Collectively compact sets of nonlinear operators in locally convex spaces. **80a:47106**

Clément, Philippe (*with* Nohel, John A.) Abstract linear and nonlinear Volterra equations preserving positivity. **80b:47095**

Dotson, W. G., Jr. *See* **Feathers, G.; et al., 80c:47059a** *and* **Feathers, G., 80c:47059b**

Feathers, G. (*with* Pace, J. Wayne; Dotson, W. G., Jr.) A nonlinear theorem of ergodic type. **80c:47059a**

(*with* Dotson, W. G., Jr.) A nonlinear theroem of ergodic type. II. **80c:47059b**

Guala, E. A class of nonlinear operators that are equivalent to the derivative in the space of analytic functions on C. (Italian. English summary) **80c:47060**

Hiermeyer, W. *See* **Batt, J., 80a:47106**

Janicka, Renata (*with* Kaczor, Wiesława) On the construction of some measures of noncompactness. (Polish and Russian summaries) **80a:47107**

Kaczor, Wiesława *See* **Janicka, Renata, 80a:47107**

de Korvin, André *See* **Alò, Richard A.; et al., 80d:47098** *and* **Alò, Richard A.; et al., 80k:47081**

Kosmol, Peter On stability of convex operators. **80b:47096**

Kusraev, A. G. Subdifferential mappings of convex operators. (Russian) **80f:47062**

Landers, Dieter (*with* Rogge, Lothar) Characterization of p-predictors. **80f:47063**

Morel, Jean-Michel *See* **Bahri, Abbas, 80b:47094**

Nohel, John A. *See* **Clément, Philippe, 80b:47095**

Otelbaev, M. (*with* Suvorčenkova, G. A.) A necessary and sufficient condition of boundedness and continuity for a class of Uryson operators. (Russian) **80g:47080**

Pace, J. Wayne *See* **Feathers, G.; et al., 80c:47059a**

Perov, A. I. Potential operators. (Russian) **80e:47058**

Rogge, Lothar *See* **Landers, Dieter, 80f:47063**

Singer, Ivan Some classes of nonlinear operators generalizing the metric projections onto Čebyšev subspaces. **80j:47089**

Suvorčenkova, G. A. *See* **Otelbaev, M., 80g:47080**

Vo Van Tho *See* **Alò, Richard A.; et al., 80d:47098**

Weissler, Fred B. Semilinear evolution equations in Banach spaces. **80f:47091**

Zaslavskiĭ, A. Ja. Description of some classes of support sets. (Russian) **80f:47092**

Secondary classifications:

Al'ber, Ja. I. The monotonicity method and the approximate computation of the value of a nonlinear unbounded operator. (Russian) **(80d:65061)**
Attouch, Hédy Convergence de fonctionnelles convexes. **(80d:49007)**
Aubin, Jean-Pierre Analyse fonctionnelle non linéaire et applications à l'équilibre économique. **(80e:90001)**
Barone, E. (*with* Belleni-Morante, A.) A nonlinear initial-value problem arising from kinetic theory of vehicular traffic. **(80b:82060)**
Belleni-Morante, A. *See* **Barone, E., (80b:82060)**
Canfora, Albino Extension and application of a surjectivity theorem of Fučik. (Italian) **(80h:35095)**
Ekeland, Ivar Nonconvex minimization problems. **(80h:49007)**
Fowler, Peter A. Correction of a generalization of a theorem of Beurling and Livingston. **(80b:46022)**
Graff, Richard A. Elements of nonlinear functional analysis. **(80j:58019)**
Helton, Jon C. Nonlinear operations and the solution of integral equations. **(80b:45023)**
Knightly, George H. (*with* Sather, D.) Nonlinear buckling and stability of cylindrical panels. **(80d:73072)**
Kusraev, A. G. Convex approximations of nonsmooth operators and necessary conditions for extremum. (Russian) **(80f:65077)**
Kutateladze, S. S. Extreme points of subdifferentials. (Russian) **(80a:46021)**
Lee, Peng Yee Linear and nonlinear transformations between sequence spaces. **(80i:40005)**
Łojasiewicz, S., Jr. (*with* Zehnder, E.) An inverse function theorem in Fréchet-spaces. **(80h:58014)**
Noor, K. I. *See* **Noor, M. Aslam, (80c:49008)**
Noor, M. Aslam (*with* Noor, K. I.) Minimum of nonlinear functionals on convex sets. **(80c:49008)**
Rogula, Dominik Geometrical and dynamical nonlocality. (Polish and Russian summaries) **(80i:73004)**
Rogulja, D. *See* **Zorskiĭ, G.; et al., (80j:70001)**
Rymaž, Č. *See* **Zorskiĭ, G.; et al., (80j:70001)**
Sather, D. *See* **Knightly, George H., (80d:73072)**
Sparing, H.-D. Analytische Operatoren vektorieller Veränderlicher in komplexen und reellen Banach-Räumen. I. **(80d:46083)**
Vanderbauwhede, André L. Generic bifurcation and symmetry with an application to the von Kármán equations. **(80f:58018)**
Zehnder, E. *See* **Łojasiewicz, S., Jr., (80h:58014)**
Zorskiĭ, G. (*with* Rogulja, D.; Rymaž, Č.) Nonlocal continuum models of discrete systems. (Russian. English summary) **(80j:70001)**

49–XX CALCULUS OF VARIATIONS AND OPTIMAL CONTROL; OPTIMIZATION [See also 34H05, 65Kxx, 90Cxx, 93–XX.]

49–01 Elementary exposition, textbooks

Secondary classifications:

Craven, Bruce Desmond ★Mathematical programming and control theory. **(80d:93001)**
Isaacs, Rufus On applied mathematics. **(80e:00008)**
Kapur, J. N. Optimization in mathematics, statistics, economics, operations research, science and technology. **(80h:00003)**
Krabs, Werner ★Einführung in die Kontrolltheorie. **(80a:93002)**

49–02 Advanced exposition (research surveys, monographs, etc.)

Cecconi, J. On the calculus of variations. (Italian. English summary) **80a:49001**
Clarke, Frank H. Optimal control and the true Hamiltonian. **80e:49001**
Henrion, R. ★Теория второй вариации и ее приложения в оптимальном управлении. (Russian) [Theory of the second variation and its applications in optimal control] **80j:49001**
Ioffe, Alexandre D. (*with* Tihomirov, V. M.) ★Theorie der Extremalaufgaben. **80d:49001a**
(*with* Tihomirov, V. M.) ★Theory of extremal problems. **80d:49001b**
(Kolmanovskiĭ, V. B.) *See* **Henrion, R., 80j:49001**
(Laderer, Bernd) *See* **Ioffe, Alexandre D.; et al., 80d:49001a**
(Makowski, Karol) *See* **Ioffe, Alexandre D.; et al., 80d:49001b**
(Nosov, V. R.) *See* **Henrion, R., 80j:49001**
Pontrjagin, L. S. Optimization and differential games. (Russian) **80b:49001**
Tihomirov, V. M. *See* **Ioffe, Alexandre D., 80d:49001a** *and* **Ioffe, Alexandre D., 80d:49001b**
Zeidler, Eberhard ★Vorlesungen über nichtlineare Funktionalanalysis. III. **80g:49001**

Secondary classifications:

Boltjanskiĭ, V. G. ★Optimal control of discrete systems. **(80f:93002)**
Chattergy, R. *See* **Wismer, David A., (80h:90004)**
(Hardin, Ron) *See* **Boltjanskiĭ, V. G., (80f:93002)**
(Pétrova, Irina) *See* **Zubov, V. I., (80a:93005)**
Wismer, David A. (*with* Chattergy, R.) ★Introduction to nonlinear optimization: a problem solving approach. **(80h:90004)**
Zubov, V. I. ★Théorie de la commande. **(80a:93005)**

49–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Fellmann, E. A. Über eine Bemerkung von G. W. Leibniz zu einem Theorem in Newtons *Principia Mathematica*. (English summary) **(80h:01005)**
(Leibniz, Gottfried Wilhelm) *See* **Fellmann, E. A., (80h:01005)**
McShane, E. J. The calculus of variations from the beginning through optimal control theory. **(80h:01022)**
(Newton, Isaac) *See* **Fellmann, E. A., (80h:01005)**

49–04 Explicit machine computation and programs (not the theory of computation or programming)

49–06 Proceedings, conferences, etc.

(Bensoussan, Alain) *See* **Symposium: Systems Optimization and Analysis, 80m:49002**
(Borkowski, Adam) *See* **Duality and complementarity in mechanics of solids, 80k:49001**
(De Giorgi, Ennio) *See* **Proceedings: International Meeting on Recent Methods in Nonlinear Analysis, 80c:49001**
(Dixon, L. C. W.) *See* **Towards global optimisation, 80a:49002**
(Lemaréchal, Claude) *See* **Nonsmooth optimization, 80d:49002**
(Lions, Jacques-Louis) *See* **Symposium: Systems Optimization and Analysis, 80m:49002**
(Magenes, Enrico) *See* **Proceedings: International Meeting on Recent Methods in Nonlinear Analysis, 80c:49001**
(Mifflin, Robert) *See* **Nonsmooth optimization, 80d:49002**
(Mosco, Umberto) *See* **Proceedings: International Meeting on Recent Methods in Nonlinear Analysis, 80c:49001**
(Szegö, G. P.) *See* **Towards global optimisation, 80a:49002**
Analyse non convexe ★Analyse non convexe. **80m:49001**
Analysis *See* **Analyse non convexe, 80m:49001**
Bull. Soc. Math. France Mem. *See* **Analyse non convexe, 80m:49001**
Colloque:
Analyse non convexe *See* **Analyse non convexe, 80m:49001**
Duality and complementarity in mechanics of solids ★Duality and complementarity in mechanics of solids. **80k:49001**
Global optimization *See* **Towards global optimisation, 80a:49002**
Jablonna *See* **Duality and complementarity in mechanics of solids, 80k:49001**
Laxenburg *See* **Nonsmooth optimization, 80d:49002**
Mechanics of deformable bodies *See* **Duality and complementarity in mechanics of solids, 80k:49001**
Mechanics of solids *See* **Duality and complementarity in mechanics of solids, 80k:49001**
Meeting:
Recent Methods in Nonlinear Analysis *See* **Proceedings: International Meeting on Recent Methods in Nonlinear Analysis, 80c:49001**
Nonconvex Analysis *See* **Analyse non convexe, 80m:49001**
Nonlinear analysis *See* **Proceedings: International Meeting on Recent Methods in Nonlinear Analysis, 80c:49001**
Nonsmooth optimization ★Nonsmooth optimization. **80d:49002**
Pau *See* **Analyse non convexe, 80m:49001**
Proceedings:
International Meeting on Recent Methods in Nonlinear Analysis ★Proceedings of the International Meeting on Recent Methods in Nonlinear Analysis. **80c:49001**
Rocquencourt *See* **Symposium: Systems Optimization and Analysis, 80m:49002**
Rome *See* **Proceedings: International Meeting on Recent Methods in Nonlinear Analysis, 80c:49001**
School-Conference:
Duality in Problems of the Mechanics of Deformable Bodies *See* **Duality and complementarity in mechanics of solids, 80k:49001**
Symposium:
Systems Optimization and Analysis ★International Symposium on Systems Optimization and Analysis. **80m:49002**
Systems optimization *See* **Symposium: Systems Optimization and Analysis, 80m:49002**
Towards global optimisation ★Towards global optimisation. 2. **80a:49002**
Workshop:
International Institute for Applied Systems Analysis *See* **Nonsmooth optimization, 80d:49002**

Secondary classifications:

(Gamkrelidze, R. V.) *See* **Mathematical analysis, (80d:00011)**
Itogi Nauki i Tekhniki *See* **Mathematical analysis, (80d:00011)**
Mathematical analysis ★Математический анализ. Том 16. (Russian) [Mathematical analysis. Vol. 16] **(80d:00011)**

49Axx Existence theory for optimal solutions

49A05 Free problems in one independent variable

Atanacković, T. M. The brachistochrone for a material point with arbitrary initial velocity. **80a:49003**
Bellman, Richard E. On multipoint boundary value problems of variational type. **80j:49002**
Berruti Onesti, Natalia On the existence of the absolute extremum for *n*th order variational problems, also with respect to a new definition of interior. (Italian) **80e:49002**
Hildebrand, S. K. *See* **Milnes, H. W., 80i:49001**
Klimov, V. S. Smoothness of the solutions of one-dimensional variational problems. (Russian) **80b:49002**
Levitin, E. S. (*with* Miljutin, A. A.; Osmolovskiĭ, N. P.) Higher order conditions for local minima in problems with constraints. (Russian) **80f:49001**
Marcellini, Paolo Some problems of semicontinuity and of Γ-convergence for integrals of the calculus of variations. **80e:49003**

Miljutin, A. A. *See* **Levitin, E. S.; et al., 80f:49001**

Milnes, H. W. (*with* Hildebrand, S. K.) A topological approach to minimizing $\int_a^b f(x,y,y')dx$ in subspaces of the plane. **80i:49001**

Osmolovskiĭ, N. P. *See* **Levitin, E. S.; et al., 80f:49001**

Ray, John R. (*with* Reid, James L.) Noether's theorem, time-dependent invariants and nonlinear equations of motion. **80i:49002**

Reid, James L. *See* **Ray, John R., 80i:49002**

Secondary classifications:

De Masi, A. One-dimensional DLR invariant measures are regular. **(80h:82017)**

Đukić, Đorđe S. On the brachistochronic motion of a dynamic system. **(80d:70023)**

Petapov, M. M. Difference approximation and the regularization of optimal control problems of Goursat-Darboux systems. (Russian) **(80f:65079)**

Veličenko, V. V. Minimal interpretation of the least action principle. (Russian) **(80m:49035)**

Vujanović, B. D. A geometrical approach to the conservation laws of non-conservative dynamical systems. **(80a:70020)**

49A10 Problems involving ordinary differential equations, optimal control

Đukić, Đorđe S. On the brachistochronic motion of a nonconservative dynamic system. **80j:49003**

Gonzalez, Roberto L. (*with* Rofman, Edmundo) Problems of "bang-bang" control with minimal time intervals between exchanges. (Spanish) **80j:49004**

Hájek, Otomar L_1-optimization in linear systems with bounded controls. **80k:49002**

Mahmudov, È. N. (*with* Pšeničnyĭ, B. N.) The optimality principle for polyhedral differential inclusions. (Russian. Azerbaijani and English summaries) **80i:49003**

Malanowski, Kazimierz On regularity of solutions to optimal control problems for systems with control appearing linearly. (Russian and Polish summaries) **80a:49004**

McAllister, G. T. *See* **McAllister, M. N.; et al., 80c:49002**

McAllister, M. N. (*with* Rohde, S. M.; McAllister, G. T.) Constructive solution of the 1918 problem of Lord Rayleigh. **80c:49002**

Morduhovič, B. Š. (*with* Sasonkin, A. M.) On the theory of duality in control systems. (Russian) **80a:49005**

Pšeničnyĭ, B. N. *See* **Mahmudov, È. N., 80i:49003**

Rofman, Edmundo *See* **Gonzalez, Roberto L., 80j:49004**

Rohde, S. M. *See* **McAllister, M. N.; et al., 80c:49002**

Sasonkin, A. M. *See* **Morduhovič, B. Š., 80a:49005**

Secondary classifications:

Cahlon, Baruch The numerical solution of a variational problem in automatic control. **(80a:65139)**

Dmitriev, M. G. *See* **Glizer, V. Ja., (80j:93101)**

Engle, W. G. Lagrange-Hamilton's formalism and the chemical reaction. I. Lagrange's equation of motion for a single reaction. Hamiltonian treatment. The concept of chemical inertia. (Portuguese summary) **(80j:80006)**

Glizer, V. Ja. (*with* Dmitriev, M. G.) The asymptotic behavior of the solution of a certain singularly perturbed Cauchy problem that arises in optimal control theory. (Russian) **(80j:93101)**

Massey, Fred A. (*with* Worth, R. E.) Interior equilibrium solutions of optimal control problems. **(80e:92031)**

Nguen Dong An' *See* **Šul'gin, A. M., (80k:70016)**

Popescu, Mihai On some classes of isoperimetric problems related to the entry into the planetary atmosphere of a space vehicle equipped with rocket propulsion. (Romanian. English summary) **(80m:70033)**

Šul'gin, A. M. (*with* Nguen Dong An') Equations for variations in the trajectory of nonholonomic mechanical systems. (Russian) **(80k:70016)**

Wilhelm, H. E. Lagrangian and Hamiltonian formulations of compressible hydrodynamics. **(80g:76034)**

Worth, R. E. *See* **Massey, Fred A., (80e:92031)**

49A21 Free problems in two or more independent variables

Frehse, Jens Un problème variationnel bidimensionnel possédant des extrémales bornées et discontinues. (English summary) **80k:49003**

Ivanova, T. P. Convergence of minimizing sequences in problems with integral functionals. (Russian) **80m:49003**

Ziemer, William P. The Dirichlet problem for Euler-Lagrange equations on arbitrary domains. **80i:49004**

Secondary classifications:

Abellanas, L. (*with* Galindo, A.) A generalized variational algebra and conserved densities for linear evolution equations. **(80g:58035b)**

Cantrijn, Frans *See* **Sarlet, Willy, (80b:70022)**

Galindo, A. (*with* Martínez Alonso, L.) Kernels and ranges in the variational formalism. **(80g:58035a)**

See also **Abellanas, L., (80g:58035b)**

Martínez Alonso, L. *See* **Galindo, A., (80g:58035a)**

Sarlet, Willy (*with* Cantrijn, Frans) On some aspects of the inverse problem for general first-order systems. **(80b:70022)**

49A22 Problems involving partial differential equations, optimal control

Abu el Ata-Doss, S. Cost function sensitivity to small parameter variations for a class of distributed control systems. **80m:49004**

Andrēēv, M. V. (*with* Gal'činskiĭ, L. Ju.) Optimal control of heat- and mass-transfer processes in a dispersed layer. (Russian. English summary) **80g:49002**

Aronsson, Gunnar An integral inequality and plastic torsion. **80g:49003**

Bandle, Catherine On isoperimetric gradient bounds for Poisson problems and problems of torsional creep. (German summary) **80i:49005**

Barron, Emmanuel Nicholas Control problems for parabolic equations on controlled domains. **80h:49001**

Boccardo, Lucio (*with* Capuzzo Dolcetta, Italo; Matzeu, Michele) Nouveaux résultats d'existence, perturbation et homogénéisation de quelques problèmes non linéaires. **80e:49004**

Caffarelli, Luis A. (*with* Friedman, Avner) Regularity of the solution of the quasivariational inequality for the impulse control problem. **80a:49006**

Capuzzo Dolcetta, Italo *See* **Boccardo, Lucio; et al., 80e:49004**

Clarke, Frank H. (*with* Ekeland, Ivar) Oscillations entretenues de systèmes hamiltoniens non linéaires. (English summary) **80j:49005**

Ekeland, Ivar *See* **Clarke, Frank H., 80j:49005**

Frehse, Jens A Landesman-Lazer alternative theorem for a class of optimization problems. **80g:49004**

Friedman, Avner *See* **Caffarelli, Luis A., 80a:49006**

Gal'činskiĭ, L. Ju. *See* **Andrēēv, M. V., 80g:49002**

Hildebrandt, Stefan (*with* Meier, Michael) On variational problems with obstacles and integral constraints for vector-valued functions. **80g:49005**

Kuliev, G. F. The existence of optimal controls for processes that are described by hyperbolic equations. (Russian. Azerbaijani and English summaries) **80k:49003**

Lamberti, Lamberto *See* **Platone Garroni, Maria Giovanna, 80j:49007**

Li, Da Qian Propriétés d'espaces fonctionnels intervenant en contrôle optimal. (English summary) **80k:49004**

Litvinov, V. G. Optimal control of coefficients in elliptic systems. (Russian) **80g:49006**

Matzeu, Michele *See* **Boccardo, Lucio; et al., 80e:49004**

Meier, Michael *See* **Hildebrandt, Stefan, 80g:49005**

Pančenkov, A. M. Singular problems of the calculus of variations and asymptotic programming. (Russian) **80i:49006**

Pardžanadze, V. V. The problem of control optimal in the sense of Nash for linear diffusion processes with various information for the players. (Russian. Georgian and English summaries) **80j:49006**

Platone Garroni, Maria Giovanna (*with* Lamberti, Lamberto) A variational problem for population dynamics with a unilateral constraint. (Italian summary) **80j:49007**

Raitums, U. Extension of extremal problems connected with linear elliptic equations. (Russian) **80e:49005**

Roitberg, Ja. A. (*with* Šeftel', Z. G.) Optimal control of systems described by general elliptic problems. (Russian) **80j:49008**

Rosen, Joe Necessity and sufficiency of f being a divergence for vanishing of variational derivatives of f: general case. **80d:49003**

Rubanovič, E. M. Some properties of conservative systems. (Russian. English summary) **80f:49002**

Šeftel', Z. G. *See* **Roitberg, Ja. A., 80j:49008**

Showalter, R. E. A Green's formula for weak solutions of variational problems. **80g:49007**

Zubarev, S. V. Control of a domain in certain systems with distributed parameters. (Russian. English summary) **80f:49003**

Secondary classifications:

Buchdahl, H. A. Scale covariant Lagrangians and spaces reciprocal to static Einstein spaces. **(80m:83030)**

Buzurnjuk, S. N. The problem of synthesis of optimal control of an object that is described by a system of equations of parabolic type. (Russian) **(80f:93046)**

Evans, Lawrence C. A second-order elliptic equation with gradient constraint. **(80m:35025a)**

Correction to: "A second-order elliptic equation with gradient constraint" [Comm. Partial Differential Equations 4 (1979), no. 5, 555–572; MR 80m:35025a]. **(80m:35025b)**

Frehse, Jens Existence of optimal controls. I. (German summary) **(80i:93027)**

Frolov, B. N. Tetrad Palatini formalism and quadratic Lagrangians in the gravitational field theory. **(80b:83044)**

Jarić, Jovo Lois de conservation du type intégrale J en élastostatique des milieux micropolaires. **(80g:73009)**

Longdon, L. W. (*with* Parfitt, Amanda M.) Finite integral transforms and the control of distributed parameter systems. **(80g:35024)**

Parfitt, Amanda M. *See* **Longdon, L. W., (80g:35024)**

Simionescu, C. (*with* Simionescu, Claudia Lidia) Complex analysis methods in control theory. (Romanian summary) **(80j:93062)**

Simionescu, Claudia Lidia *See* **Simionescu, C., (80j:93062)**

Sperb, René (*with* Stakgold, Ivar) Estimates for membranes of varying density. **(80e:49035)**

Stakgold, Ivar *See* **Sperb, René, (80e:49035)**

Strang, Gilbert A family of model problems in plasticity. **(80f:73040)**

White, Luther W. Control problems governed by a pseudo-parabolic partial differential equation. **(80d:49019)**

49A27 Problems in abstract spaces

Ahmed, N. U. (*with* Teo, K. L.) Optimal control of systems governed by a class of nonlinear evolution equations in a reflexive Banach space. **80k:49005**

Arthurs, A. M. (*with* Hart, V. G.) The method of the hypercircle for a class of nonlinear equations. **80b:49004**

Barbu, Viorel (*with* Da Prato, Giuseppe) Local existence for a nonlinear operator equation arising in synthesis of optimal control. **80m:49005**

Caligaris, Ottavio (*with* Oliva, Pietro) Some remarks about Bolza and Lagrange problems in Hilbert spaces. (Italian summary) **80a:49007**

(*with* Oliva, Pietro) An existence theorem for Lagrange problems in Banach spaces. **80k:49006**

(*with* Oliva, Pietro) A variational approach to existence theorems for time

dependent multivalued differential equations. 80j:49009
Čekanov, Ju. N. *See* Vladimirov, A. A.; et al., 80m:49006
Da Prato, Giuseppe *See* Barbu, Viorel, 80m:49005
Gwinner, Joachim Zur schwachen Unterhalbstetigkeit nichtlinearer Funktionale. 80c:49003
Hart, V. G. *See* Arthurs, A. M., 80b:49004
Lebourg, Gérard Sous-dérivabilité de fonctions semi-continues et convergence de dérivées: quelques résultats en densité. (English summary) 80d:49004
Solutions "en densité" de problèmes d'optimisation paramétrés. (English summary) 80g:49008
Lions, Jacques-Louis Asymptotic methods in the optimal control of distributed systems. 80g:49009
Nouveaux espaces fonctionnels en théorie du contrôle des systèmes distribués. (English summary) 80i:49007
Mignanego, Fausto Optimal control of abstract evolution equations over unbounded time domains. (Italian summary) 80k:49007
Nesterov, Ju. E. *See* Vladimirov, A. A.; et al., 80m:49006
Oliva, Pietro *See* Caligaris, Ottavio, 80a:49007; Caligaris, Ottavio, 80j:49009 *and* Caligaris, Ottavio, 80k:49006
Rubio, J. E. Existence and approximation in control problems in Hilbert spaces. 80k:49002
Simionescu, Claudia Lidia Optimal control problems in distributions. (Romanian summary) 80d:49005
Singer, Ivan Some new applications of the Fenchel-Rockafellar duality theorem: Lagrange multiplier theorems and hyperplane theorems for convex optimization and best approximation. 80d:49006
Teo, K. L. *See* Ahmed, N. U., 80k:49005
Vladimirov, A. A. (*with* Nesterov, Ju. E.; Čekanov, Ju. N.) Uniformly convex functionals. (Russian) 80m:49006

Secondary classifications:

Fonte, G. On the variational method in quantum mechanics. (Italian and Russian summaries) (80d:81041)
Friedland, Shmuel Extremal eigenvalue problems. (80e:49031)
Fučík, Svatopluk Variational noncoercive nonlinear problems. (80j:47079)
Mesirov-Kazdan, Jill P. A classification for polynomial Lagrangians. (80e:58011)
Miersemann, Erich Über höhere Verzweigungspunkte nichtlinearer Variationsungleichungen. (80e:58014)
Penot, Jean-Paul (*with* Théra, Michel) Polarité des applications convexes à valeurs vectorielles. (English summary) (80i:46014)
Sasai, Hitoshi Approximation of optimal control problems governed by non-linear evolution equations. (80a:49066)
Théra, Michel *See* Penot, Jean-Paul, (80i:46014)

49A29 Variational inequalities

Attouch, Hédy Convergence de fonctionnelles convexes. 80d:49007
Bakušinskiĭ, A. B. Equivalent transformations of variational inequalities and their use. (Russian) 80m:49007
Bensoussan, Alain (*with* Lions, Jacques-Louis) On the asymptotic behaviour of the solution of variational inequalities. 80g:49010
(*with* Friedman, Avner) On the support of the solution of a system of quasivariational inequalities. 80g:49011
Biroli, Marco *G*-convergence for elliptic equations, variational inequalities and quasi-variational inequalities. (Italian summary) 80d:49008
Boccardo, Lucio (*with* Capuzzo Dolcetta, Italo) Stability of the solutions to quasilinear elliptic and parabolic variational inequalities. (Italian. English summary) 80d:49009
Brass, Bettina An obstacle problem and its solution by quasivariational inequalities. 80b:49003
Brézis, Haïm The Hamilton-Jacobi-Bellman equation for two operators via variational inequalities. 80f:49004
The Hamilton-Jacobi-Bellman equations and variational inequalities. 80f:49008
Buslaev, A. P. An extremal problem that is connected with inequalities for derivatives. (Russian. English summary) 80d:49010
(*with* Tihomirov, V. M.) Inequalities for derivatives in the multidimensional case. (Russian) 80i:49009
Capuzzo Dolcetta, Italo *See* Boccardo, Lucio, 80d:49009
Cortey-Dumont, Philippe Sur l'approximation d'une classe d'inéquations quasi variationnelles associée à des problèmes de contrôle impulsionnel. (English summary) 80m:49008
Eckhaus, Wiktor (*with* Moet, H. J. K.) Asymptotic solutions in free boundary problems of singularly perturbed elliptic variational inequalities. 80c:49004
Frehse, Jens (*with* Mosco, Umberto) Variational inequalities with one-sided irregular obstacles. 80i:49010
Friedman, Avner Quality control and quasivariational inequalities. 80j:49010
See also Bensoussan, Alain, 80g:49011
Georg, Kurt An application of simplicial algorithms to variational inequalities. 80b:49004
Ghelardoni, P. A contribution to the solution of variational inequalities in R^n. (Italian. English summary) 80d:49011
Gwinner, Joachim On the existence and approximation of solutions of pseudomonotone variational inequalities. 80f:49005
Hanouzet, Bernard (*with* Joly, Jean-Luc) Convergence uniforme des itérés définissant la solution d'inéquations quasi-variationnelles et application à la régularité. 80j:49011
Janovský, Vladimír Regularity of mildly nonlinear variational inequalities. (Italian summary) 80c:49006
(*with* Whiteman, John Robert) Error analysis of finite element methods for mildly nonlinear variational inequalities. 80f:49006
Joly, Jean-Luc *See* Hanouzet, Bernard, 80j:49011
Kluge, Reinhard On some parameter determination problems and quasi-variational inequalities. 80g:49012
On some parameter determination problems in variational and quasivariational inequalities. I. 80m:49009
Kučera, Milan A new method for obtaining eigenvalues of variational inequalities based on bifurcation theory. (Czech summary) 80m:49010
Langlais, Michel Sous-solutions d'un problème unilatéral dégénéré: caractérisation et estimation. (English summary) 80i:49011
Lions, Jacques-Louis *See* Bensoussan, Alain, 80g:49010
Matzeu, Michele (*with* Vivaldi, Maria Agostina) On the regular solution of a nonlinear parabolic quasivariational inequality related to a stochastic control problem. 80h:49005
Milani, Albert On a variational inequality with time dependent convex constraints for the Maxwell equations. (Italian summary) 80d:49012
Moet, H. J. K. *See* Eckhaus, Wiktor, 80c:49004
Mosco, Umberto Nonlinear quasivariational inequalities and stochastic impulse control theory. 80g:49013
See also Frehse, Jens, 80i:49010
Mossino, Jacqueline Application des inéquations quasi-variationnelles à quelques problèmes non linéaires de la physique des plasmas. (English summary) 80g:49014
Nagai, Toshitaka Estimates for the coincidence sets of solutions of elliptic variational inequalities. 80g:49015
Naumann, Joachim On a class of variational inequalities of Volterra type. (Italian summary) 80c:49005
Noor, M. Aslam Error analysis of generalized variational inequalities. 80i:49012
Riddell, R. C. Eigenvalue problems for nonlinear elliptic variational inequalities. 80d:49013
Simons, Stephen Variational inequalities via the Hahn-Banach theorem. 80f:49007
Stroescu, Elena Perturbation of nonlinear partial differential variational inequalities. II. 80g:49016
Tihomirov, V. M. *See* Buslaev, A. P., 80i:49009
Vivaldi, Maria Agostina *See* Matzeu, Michele, 80h:49005
Whiteman, John Robert *See* Janovský, Vladimír, 80f:49006
Yamada, Naoki Estimates on the support of solutions of elliptic variational inequalities in bounded domains. 80g:49017

Secondary classifications:

Anderson, Robert F. (*with* Friedman, Avner) Multidimensional quality control problems and quasivariational inequalities. (80f:93086a)
(*with* Friedman, Avner) Quality control for Markov chains and free boundary problems. (80f:93086b)
Attouch, Hédy Convergence des solutions d'inéquations variationnelles avec obstacle. (80g:35010)
Biroli, Marco An estimate on convergence for a homogenisation problem for variational inequalities. (80i:35070)
G-convergence for elliptic variational and quasivariational inequalities. (80i:35071)
Une estimation dans $L^p(\Omega)$ du gradient de la solution d'une inéquation elliptique du second ordre. (English summary) (80d:35145)
Bittner, Leonhard Ein Modell für eine Klasse von Aufgaben optimaler Steuerung. (English and Russian summaries) (80j:49022)
Brézis, Haïm Nonlinear problems related to the Thomas-Fermi equation. (80j:81088)
Caffarelli, Luis A. (*with* Friedman, Avner) The obstacle problem for the biharmonic operator. (80g:35049)
(*with* Rivière, Nestor M.) The Lipschitz character of the stress tensor, when twisting an elastic plastic bar. (80d:73027)
Friedman, Avner On the free boundary of a quasivariational inequality arising in a problem of quality control. (80f:93086c)
See also Anderson, Robert F., (80f:93086a); Anderson, Robert F., (80f:93086b) *and* Caffarelli, Luis A., (80g:35049)
Glashoff, Klaus Über die Behandlung inverser Probleme bei streng zeichenfesten Kernen. (80i:65072)
Gogodze, I. K. Necessary optimality conditions for systems described by elliptic variational inequalities. (Russian. Georgian and English summaries) (80m:49024)
Gwinner, Joachim ★Nichtlineare Variationsungleichungen mit Anwendungen. (80g:47075)
Haslinger, Jaroslav On numerical solution of a variational inequality of the 4th order by finite element method. (Czech and Russian summaries) (80k:65089)
Joulak, Habib Sur un théorème d'existence et d'unicité applicable à certains problèmes de diffraction dans un domaine extérieur. Développement en série de la solution. (English summary) (80m:73072)
Kaljakin, L. A. Variational inequalities with a small parameter. (Russian) (80g:47012)
Naumann, Joachim On evolution inequalities of Navier-Stokes type in two dimensions. (80m:35062)
Norando, Tullia The almost periodic solution of a variational inequality with an almost periodic obstacle. (Italian. English summary) (80f:35009)
Panagiotopoulos, P. D. (*with* Zastrow, U.) An integral "equation" approach to the unilateral contact problem. (80k:73073)
Platone Garroni, Maria Giovanna (*with* Troianiello, Giovanni Maria) Some regularity results and a priori estimates for solutions of variational and quasi-variational inequalities. A survey. (80g:35060)
Reddy, J. N. On the accuracy and existence of solutions to primitive variable models of viscous incompressible fluids. (80b:76011)
Rivière, Nestor M. *See* Caffarelli, Luis A., (80d:73027)
Robin, Maurice Contrôle impulsionnel avec retard pour les processus de diffusion. (80f:93041)
Pulse control with time lag for diffusion processes. (Russian) (80g:93090)
Scarpini, Francesco Monotone algorithms for the resolution of variational inequalities relative to nonlinear operators. (Italian) (80f:90137)
Showalter, R. E. A Green's formula for weak solutions of variational problems. (80g:49007)

Tanabe, Hiroki On some unilateral problem of elliptic and parabolic type. (80d:35033)
Troianiello, Giovanni Maria *See* Platone Garroni, Maria Giovanna, (80g:35060)
Zastrow, U. *See* Panagiotopoulos, P. D., (80k:73073)

49A34 Problems involving functional relations other than differential equations

Aubert, G. (*with* Tahraoui, R.) Théorèmes d'existence pour des problèmes du calcul des variations du type: Inf $\int_0^L f(x, u'(x))dx$ et Inf $\int_0^L f(x, u(x), u'(x))\,dx$. 80f:49013
Dervieux, Alain *See* Palmerio, Bernadette, 80b:49005
Hanouzet, Bernard (*with* Joly, Jean-Luc) Régularité $W^{2,p}$ pour une I.Q.V. avec conditions de Neumann. 80h:49006
Joly, Jean-Luc *See* Hanouzet, Bernard, 80h:49006
Lovelady, David Lowell Iterative maximization subject to stochastic constraints. 80c:49006
Oettli, Karl Werner Approximate solutions of variational inequalities. 80a:49008
Palmerio, Bernadette (*with* Dervieux, Alain) Hadamard's variational formula for a mixed problem and an application to a problem related to a Signorini-like variational inequality. 80b:49005
Schwartz, Bernd Zur Minimierung diskreter Maximumfunktionen mit Beschränkungen. 80g:49018
Tahraoui, R. *See* Aubert, G., 80i:49013
Tyĭlek, V. N. Smoothness of the extremals of variational problems with constraint. (Russian) 80j:49012
Yeh, Lang Shuen Existence theorems for optimal control problems characterized by Volterra integral equations. 80f:49008

Secondary classifications:

Giaquinta, Mariano (*with* Modica, Giuseppe; Souček, J.) Functionals with linear growth in the calculus of variations. I, II. (80b:35047)
Modica, Giuseppe *See* Giaquinta, Mariano; et al., (80b:35047)
Souček, J. *See* Giaquinta, Mariano; et al., (80b:35047)

49A36 Optimal solutions belonging to restricted classes (bang-bang controls, etc.)

Čerenkov, A. P. An integral resource allocation problem. (Russian) 80i:49014
Ioakimov, S. H. Solution of an extremal problem. (Bulgarian. Russian and English summaries) 80k:49008
Sussmann, Héctor J. A bang-bang theorem with bounds on the number of switchings. 80k:49009

Secondary classifications:

Conti, R. Control and the van der Pol equation. (80e:93032)
Goodwin, Graham C. (*with* Ramadge, Peter J.) Design of restricted complexity adaptive regulators. (80i:93038)
Hájek, Otomar L_1-optimization in linear systems with bounded controls. (80k:49002)
Ramadge, Peter J. *See* Goodwin, Graham C., (80i:93038)

49A40 Minimax problems

Barbu, Viorel Hamiltonian systems in a neighborhood of a saddle point. 80j:49013
Brosowski, B. Zur stetigen Parameterabhängigkeit der Menge der Minimalpunkte bei Minmax-Aufgaben. 80c:49007
Klötzler, Rolf On a general concept of duality in optimal control. 80g:49019
Liu, Fon Che A note on the von Neumann-Sion minimax principle. 80e:49007

49A45 Game theory; pursuit and evasion [See also 90Dxx.]

49A50 Topology of solutions, weak and strong minima, semicontinuity, convexity, orientor fields

Altman, Mieczyslaw A general extremum principle for optimization problems. 80i:49015
Attouch, Hédy Convergence de solutions d'inéquations variationnelles avec obstacle. (English summary) 80b:49006
Racciotti, Andrea Structure métrique des orbites de familles symétriques de champs de vecteurs et théorie du temps minimum. 80d:49014
Barbu, Viorel On convex control problems on infinite intervals. 80b:49007
Berdyšev, V. I. Continuity of multivalued mappings connected with the minimization of convex functionals. (Russian) 80b:49008
Berruti Onesti, Natalia Concerning semicontinuity in variational problems with reference to a new definition of order n. (Italian) 80a:49009
Candeloro, Domenico (*with* Pucci, Patrizia) A lower closure theorem with respect to a sequence of measures for optimal control problems. (Italian) 80f:49009
Carbone, Luciano Sur un problème d'homogénéisation avec des contraintes sur le gradient. (English summary) 80j:49014
Céa, Jean ★Lectures on optimization—theory and algorithms. 80i:49016
De Giorgi, Ennio Convergence problems for functionals and operators. 80k:49010
Dolecki, Szymon (*with* Rolewicz, Stefan) Metric characterizations of upper semicontinuity. 80f:49010
Elsner, Goswin A counterexample for some lower semicontinuity results. 80d:49015
Ekeland, Ivar Nonconvex minimization problems. 80h:49007
Fougères, Alain (*with* Peralba, Jean-Claude) Application au calcul des variations de l'optimisation intégrale convexe. 80f:49011
Gasi, Naoum Un théorème de sélection mesurable. (English summary) 80k:49011
Göpfert, Alfred Hadamard's and optimization-theoretical instability. 80j:49015
Haudidier, Dominique Changement de temps et optimisation "multicritère". (English summary) 80i:49017
Hautus, M. L. J. On the uniform boundedness of solutions of contingent equations. 80g:49020
Hiriart-Urruty, Jean-Baptiste Théorèmes de valeur moyenne en analyse non différentiable: cas des fonctions localement Lipschitz à valeurs vectorielles. (English summary) 80a:49010
Hoàng Tuy *See* Phạm Cảnh Du'o'ng, 80j:49016
Klimovickaja, N. M. Canonical strategies in the problem of minimizing the mean value of a convex functional. (Russian. English summary) 80m:49011
Kosmol, Peter (*with* Wriedt, Michael) Starke Lösbarkeit von Optimierungsaufgaben. 80c:49008
Looney, Carl G. Dentable functions and radially uniform quasi-convexity. 80a:49011
Luppa, Liana On the behavior of certain hyperbolic functions. (Romanian. French summary) 80i:49018
Moreau, J. J. Rafle par un convexe à courbure minorée: questions asymptotiques. 80a:49012
Noor, K. I. *See* Noor, M. Aslam, 80c:49008
Noor, M. Aslam (*with* Noor, K. I.) Minimum of nonlinear functionals on convex sets. 80c:49008
Peralba, Jean-Claude *See* Fougères, Alain, 80f:49011
Phạm Cảnh Du'o'ng (*with* Hoàng Tuy) Stability, surjectivity and local invertibility of nondifferentiable mappings. 80j:49016
Popescu, Vasile An existence theorem for convex control problems of linear differential systems of retarded type. 80j:49017
Pucci, Patrizia The problem of determining all solutions of an orientor field. (Italian) 80g:49021
See also Candeloro, Domenico, 80f:49009
Rockafellar, R. Tyrrell Higher derivatives of conjugate convex functions. 80g:49022
Duality in optimal control. 80a:49013
★La théorie des sous-gradients et ses applications à l'optimisation. 80g:49023
Rolewicz, Stefan *See* Dolecki, Szymon, 80f:49010
Šabin, M. M. A boundary value problem in a class of discontinuous functions and the calculus of variations. (Russian) 80g:49024
Šalyev, Č. *See* Seisov, Ju. B., 80c:49009
Seisov, Ju. B. (*with* Šalyev, Č.) Convexity conditions of sets of attainability. (Russian. Turkmen and English summaries) 80c:49009
Tagawa, Shôjirô Optimierung mit mengenwertigen Abbildungen. 80f:49012
Thibault, Lionel Subdifferentials of compactly Lipschitzian vector-valued functions. 80c:49010
Subdifferentiability of compactly Lipschitzian mappings. 80i:49019
Toland, J. F. On the stability of rotating heavy chains. 80d:49016
(Vanderstraeten-Tilquin, Godelièvre) *See* Rockafellar, R. Tyrrell, 80g:49023
Vrabie, Ioan I. Time optimal control for contingent equations in Hilbert spaces. 80f:49013
Wriedt, Michael *See* Kosmol, Peter, 80c:49008

Secondary classifications:

Attéia, Marc Topologie forte sur un espace φ-hilbertien. (English summary) (80k:46049)
(*with* Dedieu, Jean-Pierre) Topologie faible sur un espace φ-hilbertien. (English summary) (80k:46050)
Aubin, Jean-Pierre Monotone evolution of resource allocations. (80b:34011)
Buttazzo, Giuseppe (*with* Dal Maso, Gianni) Γ-limit of a sequence of nonconvex and non-equi-Lipschitz integral functionals. (80k:54026)
Dal Maso, Gianni *See* Buttazzo, Giuseppe, (80k:54026)
Dedieu, Jean-Pierre *See* Attéia, Marc, (80k:46050)
Guljanickiĭ, L. F. Some functional concepts in discrete spaces. (Russian. English summary) (80h:52002)
Hamilton, Eugene P. Antiderivatives and potentials of local differential operators. (80a:35116)
Hansohm, Jürgen Iterative Bestimmung der Lösung einer Variationsungleichung für quasimonotone Operatoren. (English summary) (80b:47075)
Hiriart-Urruty, Jean-Baptiste Tangent cones, generalized gradients and mathematical programming in Banach spaces. (80i:58011)
Laborde, Patrick On visco-plasticity with hardening. (80g:73035)
Levikov, A. A. Limit properties of a dynamical system with convex constraints. (Russian) (80g:93053)
Nougaès-Sainte-Beuve, Marie-France Semi-continuité inférieure de fonctionnelles intégrales. (English summary) (80e:49009)
Olver, Peter J. (*with* Shakiban, Chehrzad) A resolution of the Euler operator. (80k:58058)
Ornstein, Donald S. (*with* Weiss, Benjamin) Ergodic theory of amenable group actions. I. The Rohlin lemma. (80j:28031)
Peetre, Jaak The Euler derivative. An intrinsic approach to the calculus of variations. (80j:58033)
Pesot, Jean-Paul The use of generalized subdifferential calculus in optimization theory. (80j:58007)
Shakiban, Chehrzad *See* Olver, Peter J., (80k:58058)
Singer, Ivan Generalizations of methods of best approximation to convex optimization in locally convex spaces. II. Hyperplane theorems. (80m:41017)
Some new applications of the Fenchel-Rockafellar duality theorem: Lagrange multiplier theorems and hyperplane theorems for convex optimization and best approximation. (80d:49006)
Vogel, Walter Halbnormen und Vektoroptimierung. (80k:90134)
Weiss, Benjamin *See* Ornstein, Donald S., (80j:28031)

49A51 Fréchet and Gâteaux differentiability

49A55 Duality theory

49A60 Optimal stochastic control [See also 93Exx.]

Lions, Pierre-Louis Équations de Hamilton-Jacobi-Bellman dégénérées. (English summary) **80f:49020**

Poljak, B. T. Methods for the solution of problems on the conditional extremum in the presence of random noise. (Russian) **80b:49009**

Secondary classifications:

Bertsekas, Dimitri P. *See* **Shreve, Steven E., (80a:93204)**

Gonzalez, Roberto L. Solution of the stochastic optimal control problem using penalty approximations. (Spanish) **(80j:93136)**

Robin, Maurice Pulse control with time lag for diffusion processes. (Russian) **(80g:93090)**

Shreve, Steven E. (*with* Bertsekas, Dimitri P.) Alternative theoretical frameworks for finite horizon discrete-time stochastic optimal control. **(80a:93204)**

Wedig, Walter Moments and probability densities of parametrically excited systems and continuous systems. **(80c:93112)**

49A99 None of the above, but in this section

Arthurs, A. M. Hypercircle estimates for nonlinear problems. **80i:49021**

Barrett, K. E. (*with* Demunshi, G.) Nonselfadjoint problems and essential boundary conditions. **80f:49014**

Bosi, Mauro (*with* Salvadori, Anna) Convergence in length and variation in the generalized sense with a weight. (Italian) **80a:49014**

Chenais, Denise Homéomorphisme entre ouverts lipschitziens. **80c:49011**

Collins, W. D. Dual extremum principles for the heat equation. **80g:49025**

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Komkov, Vadim Quaternions, Fréchet differentiation, and some equations of mathematical physics. I. Critical point theory. **80i:49022**

Lasiecka, Irena Generalization of Dubovitzky-Milutyn optimality conditions. **80a:49015**

Lempio, F. (*with* Mäurer, Helmut) Differentiable perturbations of infinite optimization problems. **80a:49016**

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Martin, D. H. Some function classes closed under infimal convolution. **80a:49018**

Mäurer, Helmut *See* **Lempio, F., 80a:49016**

Rousselet, Bernard ★Identification de domaines et problèmes de valeurs propres. **80c:49012**

Salvadori, Anna *See* **Bosi, Mauro, 80a:49014**

Smith, Peter On the construction of operators and bounding functionals for dual extremum principles. (German and Russian summaries) **80b:49010**

Tret'jak, A. I. Asymptotic solution of certain optimal control problems with lags. (Russian) **80a:49019**

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Atanacković, T. M. Homogeneous deformation process with minimal stress work. (German and Serbo-Croatian summaries) **(80a:73004)**

Barducci, A. (*with* Lusanna, L.) The spherical rigid body: a pole-dipole singularity. (Italian and Russian summaries) **(80b:83034)**

Bedford, Anthony (*with* Drumheller, Douglas S.) A variational theory of immiscible mixtures. **(80a:76048)**

See also **Drumheller, Douglas S., (80b:80005)**

Benker, H. (*with* Dietrich, H.) Anwendung der Dualitätstheorie auf Probleme der optimalen Steuerung. (English and Russian summaries) **(80g:93051)**

Beyer, W. A. *See* **Mantini, Lisa A., (80d:76092)**

Bountis, Tassos *See* **Helleman, Robert H. G., (80k:70027)**

Carriero, Michele (*with* Pascali, Eduardo) Γ-convergence of nonnegative integrals dominated by functionals of area type. (Italian. English summary) **(80h:49025)**

Černous'ko, F. L. Problems of optimization of mechanical systems. (Russian. English summary) **(80d:73101)**

Concus, Paul (*with* Finn, Robert) The shape of a pendent liquid drop. **(80i:76012)**

Dedieu, Jean-Pierre Critères de fermeture pour l'image d'un fermé non convexe par une multiapplication. (English summary) **(80d:46017)**

Derrida, B. (*with* Gervois, A.; Pomeau, Y.) Universal metric properties of bifurcations of endomorphisms. **(80k:58078)**

Deshpande, Nilendra G. (*with* Kielanowski, P.) A note on quantization of Weinberg-Salam unified field theory. **(80b:83025)**

Dietrich, H. *See* **Benker, H., (80g:93051)**

Dixon, William G. Relativistic foundations for thermostatics. **(80d:80002)**

Drumheller, Douglas S. (*with* Bedford, Anthony) On the mechanics and thermodynamics of fluid mixtures. **(80b:80005)**

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Đukić, Đ. S. (*with* Strauss, A. M.) Noether's theory for nonconservative generalised mechanical systems. **(80m:70023)**

Finn, Robert *See* **Concus, Paul, (80i:76012)**

Fiziev, P. P. On the relation between the symmetry of the dynamic equations and the Noether's theorem in classical Lagrange mechanics. (Russian summary) **(80h:70020)**

Gervois, A. *See* **Derrida, B.; et al., (80k:58078)**

Goossens, M. Unrestricted second-order tensor virial equations for linear oscillations of magnetic configurations. **(80b:85005)**

Gura, N. M. Shell of revolution of maximum stiffness in torsion. **(80i:73054)**

Gurtin, Morton E. (*with* MacCamy, Richard C.; Murphy, Lea F.) On optimal strain paths in linear viscoelasticity. **(80g:73038)**

Hamel, Georg ★Theoretische Mechanik. **(80a:70001)**

Hansen, Erik B. On a method of measuring diffusion coefficients of solid materials. (German summary) **(80d:73077)**

Helleman, Robert H. G. (*with* Bountis, Tassos) Periodic solutions of arbitrary period, variational methods. **(80k:70027)**

Hermesh, R. (*with* Katzir, S.; Kreindler, E.) Optimal thrust for maximal rocket turn. **(80m:70032)**

Hoffmann-Ostenhof, Thomas Lower and upper bounds to the decay of the ground state one-electron density of helium-like systems. **(80h:81080)**

Iegi, È. M. A mathematical model of the problem of optimal design of systems of rods. (Russian) **(80d:73102)**

Jappa, Ju. A. *See* **Stepanov, V. E., (80d:83066)**

Katzir, S. *See* **Hermesh, R.; et al., (80m:70032)**

Kielanowski, P. *See* **Deshpande, Nilendra G., (80b:83025)**

Kil'čevs'kiĭ, M. O. (*with* Kil'činskaja, G. A.; Tkačenko, N. E.) ★Аналитическая механика континуальных систем. (Russian) [Analytical mechanics of continuous systems] **(80f:70002)**

Kil'činskaja, G. A. *See* **Kil'čevs'kiĭ, M. O.; et al., (80f:70002)**

Ključkovs'kiĭ, Ju. B. Action integrals of the type of Fokker integrals and relativistic Lagrangians of instantaneous interaction of two particles in linear approximation. (Russian. English summary) **(80a:81133)**

Komljenović, S. The laws of conservation of one-dimensional motion of nonlinear continuum. **(80d:76022)**

Kreindler, E. *See* **Hermesh, R.; et al., (80m:70032)**

Kruzelecki, Jacek Some problems of optimal design of axially symmetric shells in the membrane state. (Polish. Russian and English summaries) **(80d:73108)**

Kunstatter, G. (*with* Moffat, J. W.) Conservation laws in a generalized theory of gravitation. **(80b:83030)**

Leipholz, H. H. E. On a variational principle for Beck's rod. **(80b:73018)**

On a variational principle for the clamped-free rod subjected to tangential follower forces. **(80d:73082)**

Lusanna, L. *See* **Barducci, A., (80b:83034)**

MacCamy, Richard C. *See* **Gurtin, Morton E.; et al., (80g:73038)**

Mantini, Lisa A. (*with* Beyer, W. A.) Optimization of natural gas production by waterflooding. **(80d:76092)**

Marčenko, V. M. Some extremal principles in the new theory of plastic flow. (Russian) **(80d:73057)**

Miglietta, F. (*with* Ricci, M.) Infinite conservation laws for the electromagnetic and the asymptotic gravitational fields. (Italian and Russian summaries) **(80d:78015)**

Mita, Katsunori Euler-Lagrange equation and conservation laws for bilocal fields. **(80a:81089)**

Moffat, J. W. *See* **Kunstatter, G., (80b:83030)**

Moreau, J. J. Le calcul des variations horizontales et l'hydrodynamique. **(80h:76010)**

Murat, François Compacité par compensation. **(80h:46043a)**

Compacité par compensation. II. **(80h:46043b)**

Murphy, Lea F. *See* **Gurtin, Morton E.; et al., (80g:73038)**

Neugebauer, G. Bäcklund transformations of axially symmetric stationary gravitational fields. **(80a:83007)**

Pascali, Eduardo *See* **Carriero, Michele, (80h:49025)**

Pomeau, Y. *See* **Derrida, B.; et al., (80k:58078)**

Ricci, M. *See* **Miglietta, F., (80d:78015)**

Rockafellar, R. Tyrrell Directionally Lipschitzian functions and subdifferential calculus. **(80j:46070)**

Sadyhov, G. G. *See* **Abbasov, A. A., (80b:93075)**

Saltanov, M. V. The variational principle for multicomponent magnetic hydrodynamics based on a generalization of the Clebsch transformation. (Russian) **(80g:76053)**

Seeberg, O. A new proof of the constructability of local equilibrium ensembles. **(80d:82023)**

Seguchi, Yasuyuki (*with* Tada, Yukio) Shape determination problems of structures by inverse variational principle. The finite element formulation. **(80d:73099)**

Stepanov, V. E. (*with* Jappa, Ju. A.) The Lie derivative of geometric objects (on the tetrad formulation of gravitational theory). (Russian. English summary) **(80d:83066)**

Steppeler, J. Fluid computations using infinitesimal functionals. **(80a:76023)**

Strauss, A. M. *See* **Djukic, Dj. S., (80m:70023)**

Tada, Yukio *See* **Seguchi, Yasuyuki, (80d:73099)**

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Tomarelli, Franco Un problème de fluidodynamique résolu avec les inéquations variationnelles. (English summary) **(80a:76019)**

Trocenko, V. A. Nonaxially symmetric oscillations of a hyperelastic circular membrane under finite perturbations. (Russian) **(80j:73017)**

Ubertini, Lucio Mathematical model for the study of the pollution in a stream. (Italian) **(80f:76043)**

Vorovič, I. I. Spectral properties of a boundary value problem of elasticity theory for a nonuniform band. (Russian) **(80h:73016)**

Zavališčin, S. T. A method of optimal synthesis in the presence of unknown perturbations. (Russian) **(80m:93060)**

49Bxx Necessary conditions and sufficient conditions for optimality

Secondary classifications:

Damamme, Gilles Minimum de la déformation généralisée d'un élément de matière, pour les chemins de déformation passant d'un état initial à un état final donnés. (English summary) **(80k:73008)**

Hamitova, R. S. The basis of conservation laws in mechanics. (Russian) **(80k:70029)**

Levickiĭ, I. A. (*with* Tišina, L. V.) Application of variational methods for the approximate construction of the Green function in problems of bending of plates. (Russian) **(80c:73048)**

Tišina, L. V. *See* **Levickiĭ, I. A., (80c:73048)**

49B05 Free problems in one independent variable

Balin, E. A. Sufficient first order optimality conditions in the time-optimality problem

with bounded phase coordinates. (Russian. Turkmen and English summaries) **80a:49023**

Friedland, Shmuel Global principle for free end point problems in optimal control and differential games. **80c:49013**

Hall, R. L. On certain functional derivatives. **80d:49017**

Handovletov, M. *See* **Oleinikov, V. A.; et al., 80a:49020**

Mansimov, K. B. On the theory of necessary conditions of a high order of optimality in discrete controlled systems with a moving right end of the trajectory. (Russian. Azerbaijani and English summaries) **80c:49014**

Nougués-Sainte-Beuve, Marie-France Semi-continuité inférieure de fonctionnelles intégrales. (English summary) **80e:49009**

Oleinikov, V. A. (*with* Seĭsov, Ju. B.; Handovletov, M.) Sufficient second order conditions for optimality. (Russian. English summary) **80a:49020**

Peterson, David W. (*with* Zalkind, Julie Herman) A review of direct sufficient conditions in optimal control theory. **80a:49021**

Seĭsov, Ju. B. Optimality of controls in the presence of phase constraints. (Russian. Turkmen and English summaries) **80a:49022**

See also **Oleinikov, V. A.; et al., 80a:49020**

Šeol', È. È. Degeneration in an elementary problem of the calculus of variations. (Russian) **80a:49024**

Toland, J. F. Duality in nonconvex optimization. **80a:49025**

Zalkind, Julie Herman *See* **Peterson, David W., 80a:49021**

Secondary classifications:

Arimoto, Suguru (*with* Gaafar, Mohamed Youssef) Optimal control for certain nonlinear systems in which control variables appear linearly. **(80c:93047)**

Gaafar, Mohamed Youssef *See* **Arimoto, Suguru, (80c:93047)**

Langholz, G. (*with* Sokolov, M.) Carathéodory controllability criterion for nonlinear dynamical systems. **(80a:93036)**

Sokolov, M. *See* **Langholz, G., (80a:93036)**

Vanderbauwhede, André L. Potential operators and the inverse problem of classical mechanics. **(80b:70027)**

49B10 Problems involving ordinary differential equations, optimal control

Abudov, A. A. Sufficient conditions of optimal processes for systems of neutral equations with initial controls. (Russian) **80e:49010**

Arutjunov, A. V. *See* **Tynjanskiĭ, N. T., 80e:49015**

Baillieul, J. Geometric methods for nonlinear optimal control problems. **80i:49023**

Baltmans, M. Switching lines on the plane. (Russian) **80b:49011**

Bobylev, N. A. *See* **Krasnosel'skiĭ, M. A.; et al., 80b:49012**

Cavin, R. K., III *See* **Howze, J. W., 80c:49016**

Chan, W. L. (*with* Ng, S. K.) Variational control problems for linear differential systems with Stieltjes boundary conditions. **80f:49015**

Christensen, G. S. *See* **Shamaly, A.; et al., 80m:49016**

Cincadze, Z. A. An optimal problem with lags in the presence of mixed constraints. (Russian. Georgian and English summaries) **80e:49011**

Dykta, V. A. Investigation of singular modes of a nonlinear system in the case of multiple maxima. **80e:49012**

El-Hawary, M. E. *See* **Shamaly, A.; et al., 80m:49016**

Frehse, Jens Existenz optimaler Steuerungen. **80h:49008**

Gorobovik, S. Ja. High order optimality conditions in a class of problems with constraints on the ends of the trajectories. (Russian) **80c:49015**

Halkin, Hubert Necessary conditions for optimal control problems with differentiable or nondifferentiable data. **80g:49026**

Howze, J. W. (*with* Cavin, R. K., III) Regulator design with modal insensitivity. **80c:49016**

Hrustalev, M. M. Necessary and sufficient conditions for optimality in the form of the Bellman equation. (Russian) **80m:49012**

Janin, Robert Conditions nécessaires d'optimalité dans un problème d'optimisation en horizon infini. (English summary) **80m:49013**

Köbler, Michael Pointwise maximum principle for convex optimal control problems with mixed control-phase variable inequality constraints. **80m:49014**

Krasnosel'skiĭ, M. A. (*with* Bobylev, N. A.; Muhamadiev, È.) The topological index of extremals of the functionals of the calculus of variations. (Russian. Tajiki summary) **80b:49012**

Lee, Cho Seng (*with* Vincent, Thomas L.) A sufficiency theorem for an optimal control of a general periodic system. **80e:49013**

Lewis, Richard M. *See* **Vinter, R. B., 80m:49017**

Malanowski, Kazimierz On normality of Lagrange multipliers for state and control constrained optimal control problems. (Russian summary) **80a:49026**

Mihalevič, V. M. An optimal control problem on a manifold. (Russian) **80a:49027**

Mikołajczyk, Leon (*with* Walczak, Stanisław) Theorems on the number of switchings for linear analytical systems. (Russian summary) **80a:49028**

Muhamadiev, È. *See* **Krasnosel'skiĭ, M. A.; et al., 80b:49012**

Müller, Hans-Otfried Herleitung eines stochastischen Maximumprinzips mit Variationsmethoden. (English and Russian summaries) **80h:49009**

Nasritdinov, G. An estimate of the number of switchings of time-optimal control for a class of nth order nonlinear control systems. (Russian. Uzbek summary) **80a:49029**

Nathanson, W. I. Control problems with intermediate constraints: a sufficient condition. **80m:49015**

Ng, S. K. *See* **Chan, W. L., 80f:49015**

Ortlieb, Claus Peter Dualität bei nichtkonvexen Steuerungsproblemen. **80e:49014**

Phan Văn Chu'o'ng Two variational problems on a two-dimensional torus. (Russian) **80d:49018**

Prosozin, Ju. F. The shortest-time problem. **80f:49016**

Razzaghi, M. Conjugate point conditions for linear quadratic control problems. **80i:49024**

Russmann, I. V. Complex estimation of a system and estimates of subsystems. **80b:49013**

Schmidt, Dirk Hinreichende Optimalitätsbedingungen für Steuerprobleme. **80a:49030**

Shamaly, A. (*with* Christensen, G. S.; El-Hawary, M. E.) A transformation for necessary optimality conditions for systems with polynomial nonlinearities. **80m:49016**

Sročko, V. A. A technique for obtaining necessary optimality conditions in continuous control problems with a free right end. (Russian) **80j:49018**

Thibault, Lionel Conditions nécessaires pour des problèmes de contrôle optimal définis par des fonctions compactement lipschitziennes. (English summary) **80h:49010**

Tynjanskiĭ, N. T. (*with* Arutjunov, A. V.) Time optimal linear processes. (Russian) **80e:49015**

Vincent, Thomas L. *See* **Lee, Cho Seng, 80e:49013**

Vinter, R. B. (*with* Lewis, Richard M.) A verification theorem which provides a necessary and sufficient condition for optimality. **80m:49017**

Walczak, Stanisław Euler-Lagrange conditions for controls with bounded variation. (Russian summary) **80g:49027**

See also **Mikołajczyk, Leon, 80a:49028**

Warga, J. A hybrid relaxed-Lagrangian second-order condition for minimum. **80j:49019**

Yamaura, Hiroo Zur Optimalität der Singularlösung: eine Verbesserung des Jacobson-Verfahrens. **80e:49016**

Zabello, L. E. Uniqueness of Pontrjagin's extremals in noninvariant systems with aftereffect. (Russian. English summary) **80g:49028**

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Bacciotti, Andrea The continuity of the minimal time function. (Italian. English summary) **(80c:49031)**

Barnes, Earl R. Stability conditions for second-order ordinary differential equations with periodic coefficients. **(80b:34066)**

Cole, R. J. (*with* Spiga, G.) On projection and variational methods in kinetic theory. **(80f:82032)**

Cribeiro, J. *See* **Gómez, A., (80i:93030)**

Gani, Naoum Application à la théorie de la commande optimale. II. (English summary) **(80c:93058)**

Glad, S. T. A combination of penalty function and multiplier methods for solving optimal control problems. **(80i:93029)**

Gómez, A. (*with* Cribeiro, J.) The maximum principle for a minimax control problem with a lag on the trajectory. (Spanish) **(80i:93030)**

Henry, Jacques Un contre-exemple en théorie de la commande en temps minimal des systèmes paraboliques. (English summary) **(80i:93027)**

Huseyin, K. *See* **Mandadi, V., (80e:73040)**

Karihaloo, B. L. (*with* Parbery, R. D.) The optimal design of beam-columns. **(80g:73045)**

Kurina, G. A. Application of the method of tents to an optimal control problem for a differential equation with a singular matrix multiplying the derivative. (Russian) **(80f:93039)**

Kuržanskiĭ, A. B. (*with* Nikonov, O. I.) Optimal control of an ensemble of trajectories. (Russian) **(80i:93042)**

Mahmudov, È. N. The optimality principle for polyhedral differential inclusions and linear problems of optimal control on linear manifolds. (Russian. Azerbaijani and English summaries) **(80i:93026)**

Malanowski, Kazimierz On regularity of solutions to optimal control problems for systems with control appearing linearly. (Russian and Polish summaries) **(80a:49004)**

Mandadi, V. (*with* Huseyin, K.) Nonlinear instability behaviour of nongradient systems. **(80e:73040)**

Mardanov, M. D. Optimality of singular controls in systems with lag. (Russian. Azerbaijani and English summaries) **(80j:93065)**

Nikonov, O. I. *See* **Kuržanskiĭ, A. B., (80i:93042)**

Nottrot, R. Optimization of dynamical systems. **(80a:93091)**

Ovajannikov, D. A. Control of trajectories. (Russian) **(80h:93034)**

Özgüner, Ümit (*with* Perkins, W. R.) Optimal control of multilevel large-scale systems. **(80h:93011)**

Parbery, R. D. *See* **Karihaloo, B. L., (80g:73045)**

Perkins, W. R. *See* **Özgüner, Ümit, (80h:93011)**

Pjatnickiĭ, E. S. *See* **Aĭzerman, M. A., (80e:93005)**

Simionescu, Claudia Lidia Control for an hereditary system. **(80h:92018)**

Spiga, G. *See* **Cole, R. J., (80f:82032)**

Sztajnic, Jerzy Necessary conditions for existence of extremum for controls with bounded variation. (Polish summary) **(80g:93040)**

Vujanović, B. D. Conservation laws of dynamical systems via d'Alembert's principle. (French and German summaries) **(80d:70040)**

Zločevskiĭ, S. I. Application of B. V. Bulgakov's method of normal coordinates in the solution of optimal control problems. (Russian. English summary) **(80d:93040)**

49B21 Free problems in two or more independent variables

Knowles, Gregory P. Time-optimal control of parabolic systems with boundary conditions involving time delays. **80a:49031**

Vlach, Milan Augmented penalty function technique for optimal control problems. **80c:49017**

Secondary classifications:

Acker, Andrew Some free boundary optimization problems and their solutions. **(80m:35078)**

49B22 Problems involving partial differential equations, optimal control

Baničuk, N. V. An extremum problem for a system with distributed parameters and determination of the optimal properties of an elastic medium. (Russian) **80a:49032**

Banks, H. T. (*with* Duban, Marie-Claude; Kernevez, Jean-Pierre) Optimal control of diffusion-reaction systems. **80f:49017**

Duban, Marie-Claude *See* **Banks, H. T.; et al., 80f:49017**

Dubovickiĭ, A. Ja. (*with* Miljutin, A. A.) Necessary conditions for the extremum in some linear problems with mixed constraints. (Russian) **80m:49018**

Gabasov, R. F. (*with* Kirillova, F. M.) On the theory of optimal control of dynamical systems. **80g:49029**

Gogodze, I. K. Optimization of linear elliptic systems in conditions of indeterminacy. (Russian. Georgian and English summaries) **80e:49017**

Jakubovič, V. A. *See* **Matveev, A. S., 80b:49015**

Kernevez, Jean-Pierre *See* **Banks, H. T.; et al., 80f:49017**

Kirillova, F. M. *See* **Gabasov, R. F., 80g:49029**

Lagnese, John Exact boundary value controllability of a class of hyperbolic equations. **80a:49033**

Lasiecka, Irena Boundary control of parabolic systems: regularity of optimal solutions. **80a:49034**

Lions, Pierre-Louis Contrôle de diffusions dans $\mathbf{R}^N$. (English summary) **80b:49014**

Matveev, A. S. (*with* Jakubovič, V. A.) Optimal control of certain systems with distributed parameters. (Russian) **80b:49015**

Miljutin, A. A. *See* **Dubovickiĭ, A. Ja., 80m:49018**

Pulvirenti, G. (*with* Santagati, G.) On the uniqueness of the solution to a minimum problem for a control process with distributed parameters. **80h:49011**

Raitums, U. Convex extremal problems with constraints on the gradient of the solution of the Poisson equation. (Russian) **80a:49035**

On optimal control problems for linear elliptic equations. (Russian) **80b:49016**

Sachs, Ekkehard Optimal control of a parabolic boundary value problem. **80a:49036**

A parabolic control problem with a boundary condition of the Stefan-Boltzmann type. (German and Russian summaries) **80a:49037**

Saguez, Christian Contrôle optimal d'un système gouverné par une inéquation variationnelle parabolique. *Observation du domaine de contact.* (English summary) **80c:49018**

Santagati, G. *See* **Pulvirenti, G., 80h:49011**

Sinulescu, Claudia Lidia *Formal solutions in optimal control.* **80b:49012**

Smith, Peter Approximate operators and dual extremum principles for linear problems. **80a:49038**

Teo, K. L. *Optimal control of systems governed by time-delayed, second-order, linear,* parabolic partial differential equations with a first boundary condition. **80m:49019**

Vasil'ev, O. V. A problem of optimal control of a process with distributed parameters and controllable boundary conditions. (Russian) **80j:49020**

Washburn, Don A bound on the boundary input map for parabolic equations with application to time optimal control. **80j:49021**

White, Luther W. Control problems governed by a pseudo-parabolic partial differential equation. **80d:49019**

v. Wolfersdorf, Lothar *Zum Maximum-Prinzip von Pontrjagin für eine Klasse partieller* Differentialgleichungssysteme I. Ordnung. (English and Russian summaries) **80m:49020**

Secondary classifications:

Balakrishnan, A. V. *Boundary control of parabolic equations: L-Q-R theory.* **(80j:93058)**

Butkovskiĭ, A. G. ★Характеристики систем с распределенными параметрами. (Russian) *[Characteristics of systems with distributed parameters]* **(80e:93019)**

Delfour, M. C. The linear quadratic optimal control problem over an infinite time horizon for a class of distributed parameter systems. **(80e:93065)**

Eichenauer, W. Zur optimalen Randkontrolle eines schwingenden Balkens. **(80d:73048)**

Hackbusch, Wolfgang On the fast solving of parabolic boundary control problems. **(80b:93025)**

Hussain, Munawar An equivalence theorem in Poincaré-Četaev variables. **(80d:70034)**

Knöpp, U. Eine exakte Lösung des Problems der optimalen Randwertsteuerung für eine *Klasse örtlich verteilter Systeme. (English and Russian summaries)* **(80h:93036)**

Lions, Jacques-Louis Remarks on the theory of optimal control of distributed systems. **(80c:93061)**

Mackenroth, Uwe *Diskretisierung eines parabolischen Kontrollproblems mit Anfangs-* und Endbedingungen. **(80g:93043)**

Mansimov, K. B. *A sequence of necessary optimality conditions for singular controls of* systems with lag. (Russian. Azerbaijani and English summaries) **(80c:93063)**

Menaldi, José-Luis Sur le problème de contrôle impulsionnel optimal pour des *diffusions réfléchies dégénérées. (English summary)* **(80m:93036)**

Méritet, Alain Méthode d'optimisation visant à déterminer la forme d'antenne filaire ayant un gain maximal. (English summary) **(80m:78025)**

Roĭtberg, Ja. A. *(with Šefteľ, Z. G.) Optimal control of systems described by general* elliptic problems. (Russian) **(80j:49008)**

Šefteľ, Z. G. *See* **Roĭtberg, Ja. A., (80j:49008)**

Singh, Punyatma *(with* Srivastava, K. K.) Variational solution of heat convection in the channel flow with the help of GPDP. **(80c:80008)**

Srivastava, K. K. *See* **Singh, Punyatma, (80c:80008)**

Stumpf, Helmut Some applications of convex analysis to non-linear elastic boundary value problems. (Russian summary) **(80d:73037)**

49B27 Problems in abstract spaces

Andry, Albert N., Jr. *On a multiplier theorem in a Banach space.* **80c:49019**

Antou, Howard *(with* Bahar, Leon Y.) On the use of Schwartz distributions in the Lagrange variational problem. **80b:49017**

Aubin, Jean-Pierre *(with* Clarke, Frank H.) Shadow prices and duality for a class of optimal control problems. **80i:49026**

Bahar, Leon Y. *See* **Antou, Howard, 80b:49017**

Bittner, Leonhard Ein Modell für eine Klasse von Aufgaben optimaler Steuerung. (English and Russian summaries) **80j:49022**

Chan, W. L. *(with* Ho, L. F.) Lower bounds and duality in the optimal control of distributed systems. **80j:49023**

Clarke, Frank H. *See* **Aubin, Jean-Pierre, 80i:49026**

Colonius, Fritz *(with* Hinrichsen, Diederich) Optimal control of hereditary differential systems. **80k:49013**

(with Hinrichsen, Diederich) Optimal control of functional differential systems. **80k:49014**

Dittmar, Eberhard Ein Maximumprinzip für Probleme der optimalen Steuerung mit Operatorbeschränkungen. (English and Russian summaries) **80j:49024**

Hinrichsen, Diederich *See* **Colonius, Fritz, 80k:49013** *and* **Colonius, Fritz, 80k:49014**

Hirschorn, R. M. Invertibility of nonlinear control systems. **80c:49020**

Ho, L. F. *See* **Chan, W. L., 80j:49023**

Holmäker, K. A minimax optimal control problem. **80i:49027**

Kluvánek, Igor *(with* Knowles, Gregory P.) The bang-bang principle. **80b:49018**

Knowles, Gregory P. *See* **Kluvánek, Igor, 80b:49018**

Krabs, Werner *(with* Sachs, Ekkehard) Controllability of distributed parameter systems. **80f:49018**

Kruger, A. Ja. *(with* Morduhovič, B. Š.) Minimization of nonsmooth functionals in optimal control problems. **80i:49028**

Lesse, S. J. Fréchet differentiability and optimal control. **80a:49039**

Morduhovič, B. Š. *See* **Kruger, A. Ja., 80i:49028**

Morris, Robert J. T. Optimal constrained selection of a measurable subset. **80h:49013**

Rolewicz, Stefan On paraconvex multifunctions. **80f:49025**

Sachs, Ekkehard *See* **Krabs, Werner, 80f:49018**

Thibault, Lionel Mathematical programming and optimal control problems defined by compactly Lipschitzian mappings. **80f:49019**

Valuberg, M. M. On the subgradient of convex functionals. (Russian. English summary) **80f:49020**

v. Wolfersdorf, Lothar On a method of L. Bittner for deriving maximum principles in optimal control processes. (German and Russian summaries) **80a:49040**

Secondary classifications:

Plotnikov, V. A. *Averaging method for differential inclusions and its application to* optimal control problems. (Russian) **(80k:34014)**

Singer, Ivan Generalizations of methods of best approximation to convex optimization *in locally convex spaces. II. Hyperplane theorems.* **(80m:41017)**

Stegall, Charles Optimization of functions on certain subsets of Banach spaces. **(80a:46022)**

Thämelt, Wolfgang Extrema linearer Funktionale auf Ordnungsintervallen. **(80d:46018a)**

Ein Dualitätssatz für lineare Optimalprobleme auf Ordnungsintervallen. **(80d:46018b)**

Struktureigenschaften linearer Optimalprobleme auf Ordnungsintervallen. **(80d:46018c)**

49B34 Problems involving functional relations other than differential equations

Bedel'baev, A. A. Necessary and sufficient optimality conditions in the Bolza problem in discrete inclusions. (Russian) **80m:49021**

Bellman, Richard E. Some functional equations arising in the calculus of variations. **80j:49025**

Čekanov, Ju. N. *See* **Vladimirov, A. A.; et al., 80f:49021**

Dubovickiĭ, A. Ja. The discrete maximum principle. **80m:49022**

Nesterov, Ju. E. *See* **Vladimirov, A. A.; et al., 80f:49021**

Sachs, Ekkehard Optimal control for a class of integral equations. **80a:49041**

Thibault, Lionel Fonctions compactement lipschitziennes et programmation mathématique. (English summary) **80i:49029**

Vladimirov, A. A. *(with* Nesterov, Ju. E.; Čekanov, Ju. N.) Uniformly quasiconvex *functionals.* (Russian) **80f:49021**

Warga, J. Controllability and a multiplier rule for nondifferentiable optimization problems. **80g:49031**

Controllability of nondifferentiable hereditary processes. **80h:49014**

v. Wolfersdorf, Lothar Necessary optimality conditions for control processes with singular integral equations and elliptic equations. **80j:49026**

Secondary classifications:

Baničuk, N. V. *Optimality conditions in the problem of seeking the hole shapes in elastic* bodies. **(80i:73012)**

(Brousse, Pierre) *See* **Structural optimization, (80h:73049)**

Brull, Maurice A. *See* **Fuchs, Moshe B., (80j:73025)**

Fuchs, Moshe B. *(with* Brull, Maurice A.) A new strain energy theorem and its use in *the optimum design of continuous beams.* **(80j:73025)**

Klement'ev, G. P. Optimality conditions for processes that are determined by integral equations. (Russian) **(80c:93064)**

Olhoff, N. *(with Taylor, J. E.) On optimal structural remodeling.* **(80h:73048)**

Taylor, J. E. *See* **Olhoff, N., (80h:73048)**

Optimization *See* **Structural optimization, (80h:73049)**

Structural optimization ★*Structural optimization.* **(80h:73049)**

49B36 *Optimal solutions belonging to restricted classes*

Dykta, V. A. Optimality of singular controls in ordinary dynamical systems. (Russian) **80j:49027**

Iwazumi, Tetsuo *See* **Kando, Hisashi, 80k:49015**

Kando, Hisashi *(with* Iwazumi, Tetsuo) Suboptimal control of a singularly perturbed

system having the terminal condition with zero slope. (Japanese. English summary) **80k:49015**

Shima, Masasuke A study of optimal impulse control problems. I. Analytical construction of free boundary. (Japanese. English summary) **80a:49042**

Surovcov, L. K. *See* **Vilkov, V. B., 80k:49017**

Tagiev, M. G. A necessary and sufficient condition for the strong extremum in a degenerate problem of the calculus of variations. (Russian) **80k:49016**

Vilkov, V. B. (*with* Surovcov, L. K.) Some sufficient conditions of existence of a saddle point for the Lagrange function. (Russian. English summary) **80k:49017**

Secondary classifications:

Jakovlev, V. M. A discrete maximum principle. (Russian) **(80b:93088)**

Jakubovič, V. A. On the abstract theory of optimal control. III. (Russian) **(80j:93064)**

Shima, Masasuke Study of optimal impulse control problems. II. Iterative procedure. (Japanese. English summary) **(80m:49030)**

49B40 Minimax problems

Černous'ko, F. L. (*with* Melikjan, A. A.) Minimax problems of control, observation and search. (Russian. Bulgarian and English summaries) **80a:49043**

Christiansen, E. *See* **Matthies, H.; et al., 80e:49019**

Daugavet, V. A. (*with* Filatova, N. S.) The dimension of the set of solutions of a convex minimax problem. (Russian. English summary) **80e:49018**

Filatova, N. S. *See* **Daugavet, V. A., 80e:49018**

Jouron, Claude Sur un problème d'optimisation où la contrainte porte sur la fréquence fondamentale. (English summary) **80f:49022**

Kramarovskiĭ, B. I. Solvability of some systems of extremal-integral equations. (Russian) **80b:49019**

Matthies, H. (*with* Strang, Gilbert; Christiansen, E.) The saddle point of a differential program. **80e:49019**

Medvedovskiĭ, I. B. A minimax theorem. (Russian) **80d:49020**

Melikjan, A. A. *See* **Černous'ko, F. L., 80a:49043**

Nakonečnyĭ, A. G. *A minimax estimate for functionals of the solutions of operator equations.* (Russian) **80b:49020**

Estimates for functionals of the solutions of differential equations. (Russian) **80b:49021**

Panin, V. M. The method of second-order for a problem of discrete minimax. (Russian) **80b:49022**

Strang, Gilbert *See* **Matthies, H.; et al., 80e:49019**

Secondary classifications:

Ekseldal, Bernt The solution of a minimax problem connected to the irreducibility of polynomials. **(80c:52012)**

Tomov, I. Minimax synthesis of linear discretely continuous systems. (Bulgarian. Russian and English summaries) **(80c:93090)**

49B50 Sensitivity of optimal solutions in the presence of perturbations

Dogru, Ali H. *See* **Koda, Masato; et al., 80b:49023**

Gaĭšun, I. V. Dependence of the complete solvability property on right-hand-side perturbations. (Russian. English summary) **80a:49044**

Koda, Masato (*with* Dogru, Ali H.; Seinfeld, John H.) *Sensitivity analysis of partial* differential equations with applications to reaction and diffusion processes. **80b:49023**

Seinfeld, John H. *See* **Koda, Masato; et al., 80b:49023**

Secondary classifications:

Biroli, Marco *G-convergence for elliptic equations, variational inequalities and quasi-variational inequalities. (Italian summary)* **(80d:49008)**

Kusraev, A. G. Necessary conditions of the extremum for nonsmooth vector-valued mappings. (Russian) **(80a:93020)**

Modica, Luciano *Γ-convergence to minimal surfaces problem and global solutions of* $\Delta u = 2(u^3 - u)$. **(80g:49042)**

49B60 Optimal stochastic control [See also 93Exx.]

Chang, Mou Hsiung Optimal control for stochastic functional differential equations. **80m:49023**

Secondary classifications:

Arkin, V. I. (*with* Krečetov, L. I.) *Markov controls in problems with discrete time.* The stochastic maximum principle. (Russian) **(80g:93087)**

(*with* Saksonov, M. T.) Necessary optimality conditions in problems of the control of stochastic differential equations. (Russian) **(80b:93076)**

Baba, Norio (*with* Shoman, Toshio; Sawaragi, Yoshikazu) A modified convergence theorem for a random optimization method. **(80h:93068)**

Friedman, Avner (*with* Robin, Maurice) The free boundary for variational inequalities with nonlocal operators. **(80j:60065)**

Jacobs, O. L. R. (*with* Potter, R. V.) *Optimal control of a stochastic bilinear system.* **(80f:93093)**

Krečetov, L. I. *See* **Arkin, V. I., (80g:93087)**

Michel, Ph. *A discrete time maximum principle in a stochastic case.* **(80b:93167)**

Potter, R. V. *See* **Jacobs, O. L. R., (80f:93093)**

Robin, Maurice *See* **Friedman, Avner, (80j:60065)**

Saksonov, M. T. *See* **Arkin, V. I., (80b:93076)**

Sawaragi, Yoshikazu *See* **Baba, Norio; et al., (80h:93068)**

Shoman, Toshio *See* **Baba, Norio; et al., (80h:93068)**

49B99 None of the above, but in this section

Abellanas, L. (*with* Galindo, A.; Martínez Alonso, L.) On a paper by J. Rosen: "Necessity and sufficiency of f being a divergence for vanishing of variational derivatives of f: general case" [Lett. Math. Phys. 3 (1979), no. 3, 237–240; MR 80d:49003]. **80k:49018**

Anderson, N. (*with* Arthurs, A. M.) A note on variational principles for complex equations. **80d:49021**

Arthurs, A. M. *See* **Anderson, N., 80d:49021**

Bakan, G. M. A new form of sufficient optimality conditions for discrete control systems. (Russian) **80e:49020**

Céa, Jean Numerical search method for an optimal domain. (Russian) **80g:49032**

Džapiašvili, N. A. *See* **Markozašvili, N. I., 80m:49025**

Galindo, A. *See* **Abellanas, L.; et al., 80k:49018**

Gogodze, I. K. Necessary optimality conditions for systems described by elliptic variational inequalities. (Russian. Georgian and English summaries) **80m:49024**

Gurov, V. M. Necessary conditions for the extremum on differential inclusions. (Russian. English summary) **80j:49028**

Hájek, Otomar Discontinuous differential equations. I, II. **80i:49030**

Mahmudov, È. N. (*with* Pšeničnyĭ, B. N.) The optimality principle for polyhedral differential inclusions. (Russian) **80b:49024**

Mansimov, F. B. *See* **Mansimov, K. B., 80j:49029**

Mansimov, K. B. A multipoint necessary condition of optimality in the singular case. (Russian. Azerbaijani and English summaries) **80a:49046**

(*with* Mansimov, F. B.) Some multipoint necessary conditions of optimality for a system with distributed parameters. (Russian. Azerbaijani and English summaries) **80j:49029**

Markozašvili, N. I. (*with* Džapiašvili, N. A.) Necessary conditions of optimality for control systems with variable lag. (Russian. Georgian and English summaries) **80m:49025**

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Medvedovskiĭ, I. B. *See* **Pšeničnyĭ, B. N., 80a:49048**

Minčenko, L. I. On the optimization of difference inclusions. (Russian. English summary) **80a:49047**

Moiseenko, G. E. Optimal partitioning of a system into subsystems. **80k:49019**

Morozov, S. F. (*with* Sumin, V. I.) Optimization of nonlinear transport processes. (Russian) **80m:49026**

Pšeničnyĭ, B. N. (*with* Medvedovskiĭ, I. B.) Necessary conditions for the extremum in a problem with mixed constraints. (Russian) **80a:49048**

See also **Mahmudov, È. N., 80b:49024**

Rolewicz, Stefan On Pontryagin maximum principle for systems with non-one-point *target sets and systems with additional constraints. (Russian and French summaries)* **80j:49030**

(Rosen, Joe) *See* **Abellanas, L.; et al., 80k:49018**

Sawaragi, Yoshikazu *See* **Tanino, Tetsuzoh, 80a:49049**

Sumin, V. I. *See* **Morozov, S. F., 80m:49026**

Tanino, Tetsuzoh (*with* Sawaragi, Yoshikazu) Stability of the solution set in problems of finding cone extreme points. (Japanese. English summary) **80a:49049**

Vasil'ev, A. A. The necessary conditions for a minimum in nonlinear approximation problems. (Russian. English summary) **80j:49031**

v. Wolfersdorf, Lothar Necessary optimality conditions in some problems of parameter control. (German and Russian summaries) **80k:49020**

Žarkov, A. V. *On the question of the existence of a positive solution to the Lur'e* equations. (Russian. English summary) **80a:49045**

Zubarev, S. V. Necessary conditions of optimality for certain systems with distributed parameters. (Russian) **80g:49030**

Secondary classifications:

Adali, Sarp Optimal shape and nonhomogeneity of a nonuniformly compressed column. **(80i:73037)**

Aliev, F. A. (*with* Larin, V. B.; Naumenko, K. I.; Suncev, V. N.) ★*Оптимизация* линейных инвариантных во времени систем управления. (Russian) [Optimization of linear time-invariant control systems] **(80d:93044)**

Andreĕev, M. V. (*with* Šor, O. I.) Equivalence conditions for multi-step and single-step optimization for control object with memory. (Russian. English summary) **(80b:93120)**

Bachelet, Catherine Méthodes de contrôle optimal pour la résolution d'équations de Monge-Ampère généralisées. (English summary) **(80d:32012)**

Ball, J. M. (*with* Knops, R. J.; Marsden, Jerrold E.) *Two examples in nonlinear* elasticity. **(80d:73033)**

Constantinescu, Ilie N. Equations in analytical mechanics for material systems with jump-like varying characteristics. (Russian. Armenian and English summaries) **(80a:70021)**

Egorov, A. I. ★*Оптимал'ное управление тепловыми и диффузионными процессами.* (Russian) [Optimal control of thermal and diffusion processes] **(80b:93077)**

Favorskiĭ, A. P. *See* **Golovizuin, V. M.; et al., (80i:76046)**

Fedoseev, A. V. *An optimal control problem for the development of a group of gas and* oil fields. (Russian) **(80c:93080)**

Finkel'štein, R. M. *See* **Rodionov, A. F., (80i:73010)** *and* **Rodionov, A. F., (80i:73011)**

Godini, G. *On convex vectorial optimization.* **(80f:49026)**

Gol'dštein, Ju. B. (*with* Solomeščˇ, M. A.) Determination of the optimal form of rods and shells with the aid of a variational principle. (Russian) **(80b:73045)**

Golovizuin, V. M. (*with* Samarskiĭ, A. A.; Favorskiĭ, A. P.) The use of the least action principle for the construction of discrete mathematical models in *magnetohydrodynamics.* (Russian) **(80i:76046)**

Healy, W. P. Line-integral Lagrangians for the electromagnetic fields interacting with charged particles. **(80d:78010)**

Il'jasov, B. G. *See* **Petrov, B. N.; et al., (80k:93021)**

Ioffe, Alexandre D. Regular points of Lipschitz functions. **(80h:58022)**

Jakovlev, V. M. On one representation of necessary conditions of optimality for discrete controlled systems. **(80m:93052)**

Jarić, J. (*with* Vukobrat, M.) On conservation laws in elastodynamics. (Russian and Serbo-Croatian summaries) **(80d:73054)**
Jefferson, T. R. *See* **Scott, C. H., (80a:93102)**
Kabal'nov, Ju. S. *See* **Petrov, B. N.; et al., (80h:93021)**
Karnaukov, V. G. *See* **Senčenkov, I. K., (80c:73037)**
Knops, R. J. *See* **Ball, J. M.; et al., (80d:73033)**
Larin, V. B. *See* **Aliev, F. A.; et al., (80d:93044)**
Levitas, V. I. On the nonlinear theory of dissipative processes. (Russian. English summary) **(80c:73009)**
Limarčenko, O. S. A variational principle for nonstationary multicomponent continual systems. (Russian) **(80b:73004)**
Lin, Jiguan G. Multiple-objective optimization by a multiplier method of proper equality constraints. I. Theory. **(80h:93043)**
Marsden, Jerrold E. *See* **Ball, J. M.; et al., (80d:73033)**
Mas'kin, N. M. Transversality conditions of matrix impulses. (Russian) **(80b:93098)**
Mihalevič, V. M. *See* **Pšeničnyĭ, B. N., (80b:58032)**
Mikulski, Leszek *See* **Szefer, Gwidon, (80d:73105)**
(Mitropol'skiĭ, Ju. O.) *See* **Aliev, F. A.; et al., (80d:93044)**
Morozov, S. F. (*with* Sumin, V. I.) Optimization of nonlinear systems of transport theory. (Russian) **(80c:82049)**
Naumenko, K. I. *See* **Aliev, F. A.; et al., (80d:93044)**
Ohyoumi, M. A. (*with* Tabarrok, B.) A generalized energy approach to the optimum design of plates and skeletal structures. **(80b:73038)**
Penot, Jean-Paul Calcul sous-différentiel et optimisation. **(80e:58018)**
Petrov, B. N. (*with* Il'jasov, B. G.; Kabal'nov, Ju. S.) On the synthesis of a class of automatic control systems. (Russian) **(80h:93021)**
Plotnikov, V. A. (*with* Zverkova, T. S.) Averaging of boundary value problems in terminal optimal control problems. (Russian) **(80b:93102)**
Pšeničnyĭ, B. N. (*with* Mihalevič, V. M.) An optimal control problem on an abstract manifold. (Russian. English summary) **(80b:58032)**
Pustyl'nikov, L. M. Basic integral equations in problems of mobile control. (Russian) **(80i:93046)**
Rodionov, A. F. (*with* Finkel'štein, R. M.) The foundations of the relativistic theory of elasticity. (Russian) **(80f:73010)**
(*with* Finkel'štein, R. M.) Deduction of the laws of conservation of momentum and energy of relativistic continua by means of the variational principle. (Russian) **(80f:73011)**
Rodionova, V. A. Variational method for obtaining some necessary optimality conditions in the mechanics of deformable bodies. (Russian) **(80i:73038)**
Russell, David L. Controllability and stabilizability theory for linear partial differential equations: recent progress and open questions. **(80c:93032)**
Samarskiĭ, A. A. *See* **Golovizmin, V. M.; et al., (80i:76046)**
Scott, C. H. (*with* Jefferson, T. R.) A duality approach to discrete time control theory. **(80a:93102)**
Senčenkov, I. K. (*with* Karnauhov, V. G.) Some variational formulas of boundary value problems of nonlinear viscoelasticity. (Russian) **(80c:73037)**
Shen, C. N. *See* **Wu, Julian J., (80d:73052)**
Solomešč, M. A. *See* **Gol'ditein, Ju. B., (80b:73045)**
Šor, O. Ĭ. *See* **Andreĕv, M. V., (80b:93120)**
Sumin, V. I. *See* **Morozov, S. F., (80c:82049)**
Suncev, V. N. *See* **Aliev, F. A.; et al., (80d:93044)**
Szefer, Gwidon (*with* Mikulski, Leszek) Optimal design of rotating discs using Pontrjagin's maximum principle. (Polish. Russian and English summaries) **(80d:73105)**
Tabarrok, B. *See* **Ohyoumi, M. A., (80b:73038)**
Vukobrat, M. *See* **Jarić, J., (80d:73054)**
Wu, Julian J. (*with* Shen, C. N.) Vibrations of a helicopter rotor blade using finite element-unconstrained variational formulations. **(80d:73052)**
Zavriev, S. K. The combined penalty function and stochastic gradient method for finding the maximin. (Russian) **(80b:93173)**
Zverkova, T. S. *See* **Plotnikov, V. A., (80b:93102)**

49Cxx Carathéodory, Hamilton-Jacobi theories, including dynamic programming [See also 90C39.]

49C05 Free problems and problems involving ordinary differential equations

Baumeister, Richard Generalized Hamilton-Jacobi theories. **80a:49050**
Bensoussan, Alain On the Hamilton-Jacobi approach for the optimal control of diffusion processes with jumps. **80c:49021**
Clarke, Frank H. (*with* Ekeland, Ivar) Solutions périodiques, de période donnée, des équations hamiltoniennes. (English summary) **80b:49025**
Degani Cattelani, Franca Further observations on the generalized Jacobi relation. (Italian) **80a:49051**
Ekeland, Ivar *See* **Clarke, Frank H., 80b:49025**
Hager, William W. Lipschitz continuity for constrained processes. **80d:49022**
Kruger, A. Ja. Necessary conditions for a weak minimum in the generalized Bolza problem. (Russian) **80a:49052**
Rumjancev, V. V. The Hamiltonian principle and Hamilton-Jacobi methods for nonholonomic systems. (Russian. English and Serbo-Croatian summaries) **80a:49053**
Tan, Sevim The general discrete transversality condition. II. (Turkish summary) **80k:49021**

Secondary classifications:

Baumeister, Richard Clebsch representations and variational principles in the theory of relativistic dynamical systems. **(80k:83022)**
Kloeden, P. E. The funnel boundary of multivalued dynamical systems. **(80c:93029)**
Krut'ko, P. D. (*with* Popov, E. P.) Canonical transformations of the equations of motion of a dynamical system. (Russian) **(80h:93035)**
Kurlandzki, Jerzy Canonical formalism in distribution spaces. II. (Russian summary) **(80k:70025)**
Leipholz, H. H. E. Variational principles for non-conservative problems, a foundation for a finite element approach. **(80d:70037)**
Mosco, Umberto Sur l'existence de la solution régulière de l'inéquation quasi-variationnelle non linéaire du contrôle optimal impulsionnel et continu. **(80c:93169)**
Mukunda, N. Aspects of the Hamilton-Jacobi form of dynamics. **(80d:70030)**
Mušicki, Đorđe On the canonical formalism with the derivatives of higher order. **(80d:70035)**
See also , **(80d:70035)**
Popov, E. P. *See* **Krut'ko, P. D., (80h:93035)**
Quade, C. Richard Development of canonical transformations from Hamilton's principle. **(80d:70031)**

49C10 Free problems and problems involving partial differential equations

Agračev, A. A. (*with* Gamkrelidze, R. V.) Exponential representation of flows and a chronological enumeration. (Russian) **80g:49036**
Cantrijn, Frans *See* **Sarlet, Willy, 80a:49055**
Frehse, Jens (*with* Mosco, Umberto) Sur la régularité des solutions faibles de certaines inéquations variationnelles et quasi variationnelles non linéaires du contrôle stochastique. (English summary) **80c:49022**
Gamkrelidze, R. V. *See* **Agračev, A. A., 80g:49036**
Klötzler, Rolf A generalization of the duality in optimal control and some numerical conclusions. **80a:49054**
McGlothin, Gerald E. Optimal control of distributed parameter systems defined on a semi-infinite spatial interval. **80f:49023**
Mosco, Umberto *See* **Frehse, Jens, 80c:49022**
Rauch, Herbert E. An engineering view of unsolved problems in constrained optimization. **80g:49033**
Rios, Hélène Étude de certains problèmes paraboliques: existence et approximation des solutions. **80i:49031**
Sarlet, Willy (*with* Cantrijn, Frans) Canonical transformations and the Hamilton-Jacobi problem for general first-order systems derivable from a variational principle. **80a:49055**

Secondary classifications:

Bačoĭ, G. S. The solution of a problem of synthesis of optimal control of systems with distributed parameters. (Russian) **(80a:93087)**
Dedecker, Paul Le théorème de Helmholtz-Cartan pour une intégrale simple d'ordre supérieur. (English summary) **(80m:58015)**
Đukić, Đorđe S. On the integral invariants in classical mechanics for quasi-coordinates. **(80d:70022)**
Jarić, J. Conservation laws of the *J*-integral type in micropolar elastostatics. **(80m:73004)**
Lukovs'kiĭ, Ĭ. O. A variational method in nonlinear problems of the theory of motion of a rigid body with a cavity that is partially filled with a fluid. (Russian) **(80d:70015)**
Rosen, Gerald Variational principles for non-Lagrangian field equations. (Italian and Russian summaries) **(80c:81022)**
Rund, Hanno Clebsch representations and relativistic dynamical systems. **(80d:83054)**
Wilson, George Commuting flows and conservation laws for Lax equations. **(80k:58059)**

49C15 Problems in abstract spaces or involving functional relations other than differential equations

Bedel'baev, A. A. Necessary and sufficient optimality conditions in the convex Bolza equation of discrete optimal control. (Russian. Kazakh summary) **80g:49034**
Kertz, Robert P. (*with* Nachman, David C.) Persistently optimal plans for nonstationary dynamic programming: the topology of weak convergence case. **80h:49015**
Kischka, Peter Übertragbarkeit periodischer Eigenschaften in dynamischen Modellen. **80h:49016**
Nachman, David C. *See* **Kertz, Robert P., 80h:49015**

Secondary classifications:

Gruszczyński, Walerian (*with* Szatkowski, Andrzej) Variational methods for the analysis of electrical circuits. (Polish. English, French, German and Russian summaries) **(80e:93023)**
Howroyd, T. (*with* Maxfield, J. E.) Functional equations with extrema. **(80d:39004)**
Maxfield, J. E. *See* **Howroyd, T., (80d:39004)**
Newell, Alan C. The general structure of integrable evolution equations. **(80k:58057)**
Noble, B. *See* **Sewell, M. J., (80e:49040)**
Sewell, M. J. (*with* Noble, B.) General estimates for linear functionals in nonlinear problems. **(80e:49040)**
Sierksma, Gerard Nonnegative matrices: the open Leontief model. **(80k:90052)**
Szatkowski, Andrzej *See* **Gruszczyński, Walerian, (80e:93023)**

49C20 Dynamic programming method

Brézis, Haïm (*with* Evans, Lawrence C.) A variational inequality approach to the Bellman-Dirichlet equation for two elliptic operators. **80e:49021**
Elster, Karl-Heinz (*with* Patzer, H.) Zur dynamischen Optimierung unendlichstufiger Prozesse in nichtautonomen Systemen. (English and Czech summaries) **80b:49026**
(*with* Patzer, H.) Zur dynamischen Optimierung unendlichstufiger Prozesse bei speziellen Problemstellungen. (English and Czech summaries) **80c:49023**
Evans, Lawrence C. *See* **Brézis, Haïm, 80e:49021**
Iwamoto, Seiichi Some operations on dynamic programmings with one-dimensional state space. **80h:49017**

Kalmykov, Y. Sufficient optimality conditions for the method of dynamic programming. (Russian) **80g:49035**

Klötzler, Rolf A-priori-Abschätzungen von Optimalwerten zu Steurungsproblemen. *I.* (English and Russian summaries) **80h:49018**

Patzer, H. *See* **Elster, Karl-Heinz, 80b:49026** *and* **Elster, Karl-Heinz, 80c:49023**

Rishel, Raymond The minimum principle, separation principle, and dynamic programming for partially observed jump processes. **80a:49056**

Rupšys, P. *A method of dynamic programming for deterministic discrete processes of* general type. (Russian. Lithuanian and English summaries) **80a:49057**

Dynamic programming for discrete stochastic systems of general form. (Russian. Lithuanian and English summaries) **80f:49032**

Saledovich, Moshe Dynamic programming and principles of optimality. **80c:49024**

Secondary classifications:

Brézis, Haïm The Hamilton-Jacobi-Bellman equations and variational inequalities. **(80f:49008)**

Jacobs, O. L. R. (*with* Potter, R. V.) Optimal control of a stochastic bilinear system. **(80f:93093)**

Lew, Art Optimal conversion of extended-entry decision tables with general cost criteria. **(80a:68032)**

Lewis, Richard M. *See* **Vinter, R. B., (80m:49017)**

Moore, E. J. *See* **Teo, K. L., (80a:93158)**

Potter, R. V. *See* **Jacobs, O. L. R., (80f:93093)**

Teo, K. L. (*with* Moore, E. J.) On directional derivative methods for solving optimal parameter selection problems. **(80a:93158)**

Vinter, R. B. (*with* Lewis, Richard M.) A verification theorem which provides a necessary and sufficient condition for optimality. **(80m:49017)**

49C99 None of the above, but in this section

Beckert, Klaus Feldtheoretische Untersuchungen zu Variationsproblemen mit Randbedingungen. **80b:49027**

Bellman, Richard E. Nonlinear equations and dynamic programming. **80a:49058**

Bismut, Jean-Michel Applications de la théorie du potentiel à des problèmes de contrôle. **80h:49019**

Bordunov, N. N. Necessary optimality conditions in a stochastic smooth-convex optimal control problem with discrete time. (Russian. English summary) **80c:49025**

Hinderer, K. On approximate solutions of finite-stage dynamic programs. **80j:49032**

Maurin, Sady A decomposition scheme for the Hamilton-Jacobi equation. **80a:49059**

Secondary classifications:

Fokas, A. S. Generalized symmetries and constants of motion of evolution equations. **(80j:70011)**

49Dxx Methods of successive approximations {For discrete problems, see 90Cxx; see also 65Kxx.}

Secondary classifications:

Gupal, A. M. Properties of functions that satisfy a local Lipschitz condition. (Russian. English summary) **(80c:26008)**

49D05 Methods based on necessary conditions

Karma, O. Approximation in optimization problems. (Russian. Estonian and English summaries) **80d:49023**

Kuraev, A. A. The analytic determination of the gradient of the target function when the state equations of the dynamical system are given in implicit form. (Russian) **80a:49060**

Secondary classifications:

Gonzalez, S. (*with* Miele, A.) Sequential gradient-restoration algorithms for optimal control problems with general boundary conditions. **(80b:93074)**

Klötzler, Rolf A generalization of the duality in optimal control and some numerical conclusions. **(80a:49054)**

Miele, A. *See* **Gonzalez, S., (80b:93074)**

Winther, Ragnar Initial value methods for parabolic control problems. **(80k:65060)**

49D07 Gradient methods

Aubin, Jean-Pierre Gradients généralisés de Clarke. **80c:49026**

Blebea, Dan (*with* Dincă, George) Remarque sur une méthode de contraction à minimiser les fonctionnelles convexes sur les espaces de Hilbert. (English summary) **80k:49012**

Dem'janov, V. F. A modified generalized gradient method in the presence of constraints. (Russian. English summary) **80d:49024**

See also **Vasil'ev, L. V., 80c:49028** *and* **Vasil'ev, L. V.; et al., 80b:49021**

Dincă, George *See* **Blebea, Dan, 80k:49012**

Duan, J. C. Rates of convergence for conditional gradient algorithms near singular and nonsingular extremals. **80d:49025**

Fuller, M. A. (*with* Grimble, M. J.) The generation of continuous gradient functions. **80a:49061**

Gaviano, M. Alternative proofs of convergence of minimisation algorithms which make use of two different types of inaccurate line search. (Italian summary) **80c:49027**

Grimble, M. J. *See* **Fuller, M. A., 80a:49061**

Ilgen, Anita Das Verhalten von Abstiegsverfahren an einer Singularität des Gradienten. (English and Russian summaries) **80h:49020**

Kopelioki, Thomas Eine Methodik zur Lösung eines optimalen Steuerungsproblems. (Russian, English and French summaries) **80d:49026**

Lisina, S. A. *See* **Vasil'ev, L. V.; et al., 80b:49021**

Maistrovskiĭ, G. D. *The gradient method for a modified Lagrange function.* (Russian) **80a:49062**

Nazarov, B. Basis of the application of dynamic programming to the variational Lagrange problem. (Russian) **80g:49037**

Solodovnikov, V. N. Calculation of the gradients of some functionals and their application to optimization problems. (Russian) **80a:49063**

Šor, N. Z. ★Методы минимизации недифференцируемых функций и их приложения. (Russian) [Minimization methods for nondifferentiable functions and their applications] **80f:49024**

Vasil'ev, L. V. (*with* Dem'janov, V. F.) The relaxation method of a generalized gradient. (Russian) **80c:49028**

(*with* Dem'janov, V. F.; Lisina, S. A.) Minimization of a convex function by means of ε-subgradients. (Russian) **80b:49021**

Secondary classifications:

Beh, L. P. *See* **Malkov, V. P.; et al., (80d:73103)**

Boland, W. Robert (*with* Kamgnia, E. R.; Kowalik, J. S.) A conjugate-gradient optimization method invariant to nonlinear scaling. **(80f:65074)**

Bol'šakova, A. T. *See* **Malkov, V. P.; et al., (80d:73103)**

Bristeau, M. O. (*with* Pironneau, O.; Glowinski, Roland; Periaux, J.; Perrier, P.) On the numerical solution of nonlinear problems in fluid dynamics by least squares and finite element methods. I. Least square formulations and conjugate gradient solution of the continuous problems. **(80c:65099)**

Cloutier, J. R. *See* **Miele, A., (80g:93054)**

Doganovskiĭ, S. A. (*with* Egorov, K. V.) A comparison of algorithms for searchless adaptation systems with a model. **(80g:93050)**

Doležal, Jaroslav (*with* Fidler, J.) Sequential gradient-restoration algorithm for optimal control problems with control constraints: gradient-projection approach. (Russian summary) **(80g:93052)**

Egorov, K. V. *See* **Doganovskiĭ, S. A., (80g:93050)**

Fidler, J. *See* **Doležal, Jaroslav, (80g:93052)**

Fortuna, Zenon Some convergence properties of the conjugate gradient method in Hilbert space. **(80f:65076)**

Gerencsér, László On the use of stability theory in the design of algorithms for structured nonlinear optimization problems. (Russian summary) **(80d:93062)**

Glowinski, Roland *See* **Bristeau, M. O.; et al., (80c:65099)**

Gol'štein, E. G. Convergence of the gradient method for finding the saddle points of modified Lagrangian functions. (Russian) **(80d:65077)**

Gruver, William A. *See* **Klein, C. F., (80g:60102)**

Kamgnia, E. R. *See* **Boland, W. Robert; et al., (80f:65074)**

Klein, C. F. (*with* Gruver, William A.) Dynamic optimization in Markovian queueing systems. **(80g:60102)**

Kowalik, J. S. *See* **Boland, W. Robert; et al., (80f:65074)**

Maĕrgoĭz, M. D. (*with* Satyr, A. V.) Properties of a first-order gradient-free algorithm for the minimization of functionals. (Russian. English summary) **(80g:49039)**

Malkov, V. P. (*with* Beh, L. P.; Bol'šakova, A. T.) Acceleration of the search process for optimal thin-walled constructions. (Russian) **(80d:73103)**

Miele, A. (*with* Cloutier, J. R.) Sequential conjugate gradient-restoration algorithm for optimal control problems with nondifferential constraints. **(80g:93054)**

Mokhtar-Kharroubi, Hocine Sur quelques méthodes de gradient réduit sous contraintes linéaires. **(80j:90098)**

Nicholson, David W. On the optimal preconditioning of nonsingular matrices. **(80m:65040)**

Periaux, J. *See* **Bristeau, M. O.; et al., (80c:65099)**

Perrier, P. *See* **Bristeau, M. O.; et al., (80c:65099)**

Pironneau, O. *See* **Bristeau, M. O.; et al., (80c:65099)**

Satyr, A. V. *See* **Maĕrgoĭz, M. D., (80g:49039)**

Shanno, David F. On the convergence of a new conjugate gradient algorithm. **(80b:65087)**

Sineglazov, V. M. Synthesis of time-optimal control. (Russian) **(80g:93058)**

49D10 Methods of steepest descent type

Amouroux, Marcel (*with* Babary, Jean Pierre) On the optimal pointwise control and parametric optimization of distributed parameter systems. **80a:49064**

Babary, Jean Pierre *See* **Amouroux, Marcel, 80a:49064**

Schittkowski, K. An adaptive precision method for nonlinear optimization problems. **80a:49065**

Zabolockaja, A. F. The asymptotic behavior of the s-step method of steepest descent in Hilbert space. (Russian) **80d:49027**

49D15 Methods of Newton-Raphson, Galerkin and Ritz types

Aly, G. M. The computation of optimal singular control. **80d:49028**

Chou, F. S. *See* **Sirisena, H. R., 80m:49027**

Mathis, F. H. (*with* Reddien, G. W.) Ritz-Trefftz approximations in optimal control. **80e:49022**

Reddien, G. W. *See* **Mathis, F. H., 80e:49022**

Sasai, Hitoshi Approximation of optimal control problems governed by non-linear evolution equations. **80a:49066**

Sirisena, H. R. (*with* Chou, F. S.) Convergence of the control parameterization Ritz method for nonlinear optimal control problems. **80m:49027**

Winther, Ragnar Error estimates for a Galerkin approximation of a parabolic control problem. **80a:49067**

Secondary classifications:

Brass, Bettina An obstacle problem and its solution by quasivariational inequalities. **(80k:49003)**

Dem'janovič, Ju. K. On the stability and the time of computations in the variational difference method. (Russian) (80k:65077)
Lin, Shih Fu A Galerkin isoparametric finite element analysis of acoustic field in lined ducts. (Chinese summary) (80f:76034)

49D20 Methods of relaxation type

Jeroslow, Robert G. Some relaxation methods for linear inequalities. 80g:49038

49D25 Finite difference methods

Glebov, V. D. Optimal control of iteration processes in problems of processing trajectory information. (Russian) 80e:49023
Malanowski, Kazimierz On convergence of finite difference approximations to optimal control problems for systems with control appearing linearly. (Russian and Polish summaries) 80k:49022

Secondary classifications:

Čukanov, S. V. On the continuous dependence of solutions of the optimal economic planning problem on the problem conditions. (80a:90150)
Vasil'ev, F. P. The convergence of a difference method for the solution of the time-optimality problem. (Russian) (80k:65059)

49D27 Decomposition methods

Secondary classifications:

Levin, Vitali I. Block logical constructions in some problems of discrete optimization. (80j:90114)

49D29 Multiplier methods

Connor, M. A. (*with* Saltavareas, P.) The application of augmented penalty functions to optimal control problems. 80e:49024
Di Pillo, G. (*with* Grippo, Luigi) On the method of multipliers for a class of distributed parameter systems. 80k:49023
Grippo, Luigi *See* Di Pillo, G., 80k:49023
Saltavareas, P. *See* Connor, M. A., 80e:49024

Secondary classifications:

Glad, Torkel (*with* Polak, Elijah) A multiplier method with automatic limitation of penalty growth. (80j:90094)
Nguyen, V. Hien (*with* Strodiot, Jean-Jacques) On the convergence rate for a penalty function method of exponential type. (80h:90130)
Polak, Elijah *See* Glad, Torkel, (80j:90094)
Strodiot, Jean-Jacques *See* Nguyen, V. Hien, (80h:90130)
v. Wolfersdorf, Lothar Necessary optimality conditions in some problems of parameter control. (German and Russian summaries) (80k:49020)

49D30 Other methods, not based on necessary conditions (penalty function, etc.)

Dolecki, Szymon (*with* Rolewicz, Stefan) Exact penalties for local minima. 80h:49022
Fioravante, Patrone *See* Roberto, Lucchetti, 80c:49029
Glčev, Todor R. The convergence of a variant of the penalty function method in the theory of optimal control. (Bulgarian. Russian and English summaries) 80k:49024
Harčev, V. N. A method of approximating the global extremum of a function of several variables. (Russian. Georgian and English summaries) 80m:49028
Neponiastchy, Pierre Étude d'un système gouverné par une inéquation différentielle. 80b:49028
Nolte, Klaus Zur Konvergenz des Algorithmus von Krylow und Černous'ko. III. (English and Russian summaries) 80j:49033
Roberto, Lucchetti (*with* Fioravante, Patrone) The ε-method and convergence in the sense of Mosco. (Italian. English summary) 80c:49029
Rolewicz, Stefan *See* Dolecki, Szymon, 80h:49022

49D35 Methods of linear programming type

Auslender, Alfred Calcul de points vérifiant des conditions nécessaires d'optimalité du second ordre. (English summary) 80c:49030

49D37 Nonlinear programming

Bolžuk, L. M. A decomposition method of solving one class of nonlinear programming problems on the basis of multilevel functional control. 80k:49025
Denel, J. On the continuity of point-to-set maps with applications to optimization. 80a:49068
Inoue, Koichi *See* Sawaragi, Yoshikazu; et al., 80b:49029
Nakayama, Hirotaka *See* Sawaragi, Yoshikazu; et al., 80b:49029
Nguyen Van Hien *See* Strodiot, Jean-Jacques, 80f:49025
Sawaragi, Yoshikazu (*with* Inoue, Koichi; Nakayama, Hirotaka) Environmental pollution control and multiplier method. 80b:49029
Strodiot, Jean-Jacques (*with* Nguyen Van Hien) Caractérisation des solutions optimales en programmation non différentiable. (English summary) 80f:49025

Secondary classifications:

Lacolle, Bernard Maximisation globale de la norme euclidienne sur un compact. Résolution approchée par utilisation des problèmes projetés. (English summary) (80e:90097)
Polak, Elijah *See* Trahan, R., (80m:90080)
Tanabe, Kunio Differential geometric methods in nonlinear programming. (80k:90033)
Trahan, R. (*with* Polak, Elijah) A derivative-free algorithm for a class of infinitely constrained problems. (80m:90080)
Vasil'ev, F. P. The loaded functional method. (Russian) (80b:65090)

49D39 Semi-infinite programming

49D40 Methods of quadratic programming type

Dem'janov, V. F. A multistep method for generalized gradient descent. (Russian) 80b:49030

49D45 Methods of convex programming type

Godini, G. On convex vectorial optimization. 80f:49026

Secondary classifications:

Dem'janov, V. F. A modified generalized gradient method in the presence of constraints. (Russian. English summary) (80d:49024)

49D49 Geometric programming

49D50 Periodic optimization

49D99 None of the above, but in this section

Anderson, N. (*with* Arthurs, A. M.) Complementary variational principles for a class of nonlinear boundary value problems. 80e:49025
Arthurs, A. M. *See* Anderson, N., 80e:49025
Avakov, E. R. Conditions of approximation of a multiple maximin by connected sets. (Russian) 80f:49033
Bagirova, N. H. Asymptotic behavior of the solution of the simplest variational problem with small retardation of the argument. (Russian. Azerbaijani and English summaries) 80m:49029
Baturin, V. A. *See* Gurman, V. I., 80j:49036
Benikov, A. I. A method of solving optimal control problems based on the linearization of the control process. (Russian) 80j:49034
Bercovier, Michel Perturbation of mixed variational problems. Application to mixed finite element methods. (French summary) 80b:49031
Dymkov, M. P. A method of constructing sets of unimprovable values of a functional in a problem of vector optimization. (Russian) 80j:49035
Gorbunov, V. K. The reduction of optimal control problems to finite-dimensional problems. (Russian) 80e:49026
Gurman, V. I. (*with* Baturin, V. A.) Construction and estimation of approximate synthesis of optimal control. 80j:49036
Hiriart-Urruty, Jean-Baptiste Théorèmes de valeur moyenne en analyse non différentiable: cas des fonctions à valeurs réelles. (English summary) 80a:49069
Ignatenko, V. N. (*with* Kondrašova, N. V.) Synthesis of an algorithm for the optimal programmed control of a system with variable parameters. (Russian. English summary) 80j:49037
Kondrašova, N. V. *See* Ignatenko, V. N., 80j:49037
Lotov, A. V. The convergence of methods of numerical approximation of attainability sets for linear differential systems with convex phase constraints. (Russian) 80d:49029
Maĕrgoĭz, M. D. (*with* Satyr, A. V.) Properties of a first-order gradient-free algorithm for the minimization of functionals. (Russian. English summary) 80g:49039
Petrov, Ju. P. *See* Veremei, E. I., 80e:49027
Satyr, A. V. *See* Maĕrgoĭz, M. D., 80g:49039
Schittkowski, K. Über Minimierungsverfahren bei approximativer Kenntnis der Zielfunktion angewandt auf die numerische Lösung von Variationsproblemen. 80i:49034
Shima, Masasuke Study of optimal impulse control problems. II. Iterative procedure. (Japanese. English summary) 80m:49030
Šolohovič, V. F. Stability of extremal problems in locally convex spaces. (Russian) 80h:49023
Veremei, E. I. (*with* Petrov, Ju. P.) Limit possibilities of linear control systems optimization. (Russian) 80e:49027

Secondary classifications:

De Giorgi, Ennio Convergence problems for functionals and operators. (80k:49010)
Gerencsér, László Numerical methods in optimal control theory. (Hungarian. English summary) (80f:93047)
Lasiecka, Irena (*with* Malanowski, Kazimierz) On discrete-time Ritz-Galerkin approximation of control constrained optimal control problems for parabolic equations. (80a:65128)
Levikov, A. A. Limit properties of a dynamical system with convex constraints. (Russian) (80g:93053)
Malanowski, Kazimierz *See* Lasiecka, Irena, (80a:65128)
Mukai, H. (*with* Polak, Elijah) On the use of approximations in algorithms for optimization problems with equality and inequality constraints. (80a:65131)
Pesch, Hans Josef Numerical computation of neighboring optimum feedback control schemes in real-time. (80j:93057)
Petriczek, Grażyna On the use of the ε-technique in two-level dynamic optimization. (Polish and Russian summaries) (80c:93053)
Polak, Elijah *See* Mukai, H., (80a:65131)
Rybašov, M. V. *See* Venec, V. I., (80k:93043)
Venec, V. I. (*with* Rybašov, M. V.) Quasioptimal control of dynamic process statics. (80k:93043)

49Exx Controllability and geometry of control problems

49E05 General dependence on controls

Dem'janov, V. F. (*with* Šomesova, V. K.) Conditional subdifferentials of convex functions. (Russian) **80a:49070**
Šapiro, A. V. Properties of the accessibility domains of a class of quasilinear controlled systems in a Banach space. (Russian. Azerbaijani and English summaries) **80b:49032**
Šomesova, V. K. *See* **Dem'janov, V. F., 80a:49070**

Secondary classifications:

Kierat, Władysław On some approximate controllability dynamic system. (Polish summary) **80a:93031**

49E10 Orientor fields (contingency equations)

Chukwu, Ethelbert Nwakuche Controllability of delay systems with restrained controls. **80k:49026**
Raczyński, S. On nonconvex control in a separable Banach space. (Russian summary) **80m:49031**

Secondary classifications:

Bainov, D. D. *See* **Dočev, D. Tr., (80g:34070)**
Chukwu, Ethelbert Nwakuche Functional inclusion and controllability of nonlinear neutral functional differential systems. **(80k:34091)**
Dawidowski, Marian On some generalization of Bogoliubov averaging theorem. **(80m:34043)**
Dočev, D. Tr. (*with* Bainov, D. D.) The existence of solutions to a class of multivalued differential equations with deviating argument. (Russian) **(80g:34070)**

49E15 Attainable sets, controllability

Bacciotti, Andrea The continuity of the minimal time function. (Italian. English summary) **80c:49031**
Dončev, Asen L. *See* **Gičev, Todor R., 80d:49030**
Fattorini, H. O. Reachable states in boundary control of the heat equation are independent of time. **80g:49040**
Gičev, Todor R. (*with* Dončev, Asen L.) Convergence of the solutions of convex optimal control problems with time delay. (Italian summary) **80d:49030**
Rettiev, N. S. Some properties of minimal invariant sets of control systems. (Russian) **80b:49033**
Stefani, G. (*with* Zecca, Pietro) Properties of convex sets with application to differential theory of multivalued functions. **80i:49035**
Zecca, Pietro *See* **Stefani, G., 80i:49035**

Secondary classifications:

Davies, Roy O. The plane is the union of three rectilinearly accessible sets. **(80c:28002)**
Frolov, E. B. *See* **Pupkov, K. A., (80g:57037)**
Korobov, V. I. A geometric criterion of local controllability of dynamical systems in the presence of constraints on the control. (Russian) **(80i:93011)**
Pupkov, K. A. (*with* Frolov, E. B.) An attainability property for nonlinear systems on manifolds. I. (Russian) **(80g:57037)**
Seidman, Thomas I. Time-invariance of the reachable set for linear control problems. **(80c:93041)**
Exact boundary control for some evolution equations. **(80e:93040)**

49E20 Interrelations between stability problems and optimization problems

Secondary classifications:

Mil'štein, G. N. Stability and stabilization of periodic motions of autonomous systems. **(80m:70025)**

49E25 Effect of perturbations on controllability

Secondary classifications:

Dončev, Asen L. *See* **Gičev, Todor R., (80d:49030)**
Gičev, Todor R. (*with* Dončev, Asen L.) Convergence of the solutions of convex optimal control problems with time delay. (Italian summary) **(80d:49030)**

49E30 Relations between controllability and optimal solutions

Secondary classifications:

Adachi, Masao *See* **Akashi, Hajime; et al., (80d:93043)**
Akashi, Hajime (*with* Imai, Hiroyuki; Adachi, Masao) On time optimal control of linear discrete-time systems by geometric approach. **(80d:93043)**
Imai, Hiroyuki *See* **Akashi, Hajime; et al., (80d:93043)**
Mordukhovič, B. Š. (*with* Sasonkin, A. M.) On the theory of duality in control systems. (Russian) **(80a:49005)**
Sasonkin, A. M. *See* **Mordukhovič, B. Š., (80a:49005)**

49E99 None of the above, but in this section

Hermann, Robert ★Cartanian geometry, nonlinear waves, and control theory. Part A. **80c:49028**
Pandolfi, Luciano Stabilization and controllability for a class of control systems. (Italian summary) **80j:49038**
Strazetdinov, T. K. Questions of measurement, stability, sensitivity and invariance of processes with distributed parameters. (Russian) **80g:49041**

49Fxx Manifolds [See also 58Exx.]

49F05 Exterior differential forms, invariant integrals (Cartan theory) [See mainly 58A15.]

Tausch, Engelbert A class of variational problems with linear growth. **80h:49024**

Secondary classifications:

Mercuri, Francesco On the rational cohomology of the spaces of unparametrized closed curves. (Italian summary) **(80k:58040)**
Rund, Hanno Generalized gauge field theories. **(80f:81072)**

49F10 Minimal surfaces [See mainly 53A10, also 58E12.]

Modica, Luciano Γ-convergence to minimal surfaces problem and global solutions of $\Delta u = 2(u^3 - u)$. **80g:49042**
Nitsche, Johannes C. C. The higher regularity of liquid edges in aggregates of minimal surfaces. **80g:49043**
Williams, Graham H. The equivalence of some variational problems for surfaces of prescribed mean curvature. **80j:49039**

Secondary classifications:

Barbosa, João Lucas Marquès Minimal surfaces. (Portuguese) **(80k:53009)**
Finn, Robert Some comparison properties and bounds for capillary surfaces. (Russian summary) **(80b:76038)**
Horikawa, Eiji Algebraic surfaces of general type with small c_1^2. III. **(80k:14012a)**
Algebraic surfaces of general type with small c_1^2. IV. **(80k:14012b)**
Kawarada, H. Numerical methods for free surface problems by means of penalty. **(80f:65133)**
Mikljukov, V. M. A new approach to the Bernštein theorem and to related questions of equations of minimal surface type. (Russian) **(80a:53005)**
Nagata, Yukiyoshi On some geometrical properties in three-dimensional Finsler space. **(80i:53014)**
Nitsche, Johannes C. C. Contours bounding at most finitely many solutions of Plateau's problem. (Russian summary) **(80e:53006)**
Payne, L. E. (*with* Philippin, Gérard A.) Some maximum principles for nonlinear elliptic equations in divergence form with applications to capillary surfaces and to surfaces of constant mean curvature. **(80k:35056)**
Philippin, Gérard A. *See* **Payne, L. E., (80k:35056)**
Ruzias, Themistocles M. On the Morse-Smale index theorem and the stability of minimal surfaces. **(80k:58042)**
Sibner, L. M. (*with* Sibner, R. J.) Nonlinear Hodge theory: applications. **(80h:58058)**
Sibner, R. J. *See* **Sibner, L. M., (80h:58058)**
Steffen, Klaus (*with* Wente, Henry C.) The nonexistence of branch points in solutions to certain classes of Plateau type variational problems. **(80k:58043)**
Tomi, Friedrich (*with* Tromba, Anthony J.) Extreme curves bound embedded minimal surfaces of the type of the disc. **(80k:53011)**
Tromba, Anthony J. *See* **Tomi, Friedrich, (80k:53011)**
Wente, Henry C. *See* **Steffen, Klaus, (80k:58043)**

49F15 Morse theory in Hilbert and other spaces [See also 57R27, 58Exx.]

49F20 Geometric measure and integration theory, integral and normal currents, flat chains and cochains, varifolds [See also 28A75, 32C30, 58A25, 58C35.]

Bombieri, E. Recent progress in the theory of minimal surfaces. **80m:49032**
Harvey, Reese (*with* Lawson, H. Blaine, Jr.) A constellation of minimal varieties defined over the group G_2. **80m:49033**
Lawson, H. Blaine, Jr. *See* **Harvey, Reese, 80m:49033**

Secondary classifications:

Dal Maso, Gianni Some theorems on the Γ-limits of measures. (Italian. English summary) **(80c:28003)**
Fichera, Gaetano Homology spaces of k-measures and related inequalities for differential forms. **(80k:58006)**
Kovalevskaja, È. I. A geometric property of extremal surfaces. (Russian) **(80f:10019)**
Levin, V. L. The Monge-Kantorovič problem of mass transfer. (Russian) **(80h:90126)**
Schwabik, Štefan (*with* Tvrdý, Milan) On linear problems in the space BV. **(80m:34013)**
Tvrdý, Milan *See* **Schwabik, Štefan, (80m:34013)**

49F22 Existence and structure of solutions to variational problems in geometric measure-theoretic setting

Bombieri, E. Recent progress in the theory of minimal surfaces. **80i:49036**
Carbone, Luciano The homogenization of a variational problem with constraints on the gradient. (Italian. English summary) **80c:49032**
Modica, Luciano A note on almost minimal currents. (Italian summary) **80j:49040**
Parks, Harold Some new constructions and estimates in the problem of least area. **80b:49034**

Secondary classifications:

Bedford, Eric (*with* Taylor, B. A.) Variational properties of the complex Monge-Ampère equation. II. Intrinsic norms. **(80j:32034)**

Taylor, B. A. *See* **Bedford, Eric, (80j:32034)**

49F25 Surface area; Weierstrass and Burkill integrals, subadditive set functions

Barbaro, Carlo (*with* Candeloro, Domenico) The approximation of the Burkill-Cesari integral for sublinear functionals on measures, and applications to the multiple integral of the calculus of variations. (Italian) **80e:49029**

Candeloro, Domenico *See* **Barbaro, Carlo, 80e:49029**

Carriero, Michele (*with* Pascali, Eduardo) Γ-convergence of nonnegative integrals dominated by functionals of area type. (Italian. English summary) **80k:49025**

Goffman, Casper Bounded variation and absolute continuity in the theory of surface area. **80a:49071**

Pascali, Eduardo *See* **Carriero, Michele, 80k:49025**

Vinti, Calogero A brief survey of the results obtained by a group of researchers at the University of Perugia on questions concerning the calculation of variations. (Italian) **80a:49072**

Secondary classifications:

Candeloro, Domenico (*with* Pucci, Patrizia) Some considerations regarding the Riemann-Stieltjes integral and the Weierstrass integral. (Italian. English summary) **(80b:26008)**

Gori Cocchieri, Candida (*with* Ragni, Marcello) Properties of functions with bounded second variation in the generalized sense. (Italian. English summary) **(80b:26010)**

Nikolaev, I. G. Solution of the Plateau problem in spaces of curvature at most *K*. (Russian) **(80k:58041)**

Obtsuka, Makoto Area formula. **(80a:28003)**

Pucci, Patrizia *See* **Candeloro, Domenico, (80b:26008)**

Ragni, Marcello *See* **Gori Cocchieri, Candida, (80b:26010)**

Siekmann, J. Über die Profilkurve einer zylindrischen Kapillarfläche. **(80a:76038)**

49F99 None of the above, but in this section

Acker, Andrew A free boundary optimization problem. **80d:49031**

Caligaris, Ottavio (*with* Oliva, Pietro) On the characterization of problems of the calculus of variations for functions of bounded variation. (Italian. English summary) **80a:49073**

Fantini, W. *See* **Zanelli, V., 80a:49076**

Ferro, Francesco Functionals defined on functions of bounded variation in $\mathbf{R}^n$ and the Lebesgue area. **80a:49074**

Gonzalez, Eduardo (*with* Serapioni, Raul) A global property of sets minimizing perimeter in $\mathbf{R}^n$. (Italian summary) **80a:49075**

Oliva, Pietro *See* **Caligaris, Ottavio, 80a:49073**

Rockafellar, R. Tyrrell Clarke's tangent cones and the boundaries of closed sets in $\mathbf{R}^n$. **80d:49032**

Salvadori, Anna On convergence in length in the generalized sense with weight for a sequence of parametric curves. (Italian) **80b:49035**

Serapioni, Raul *See* **Gonzalez, Eduardo, 80a:49075**

Sternberg, Shlomo Some preliminary remarks on the formal variational calculus of :Gel'fand and Dikiĭ. **80c:49033**

Zanelli, V. (*with* Fantini, W.) Nonlinear duality and problems of the calculus of variations. (Italian) **80a:49076**

Secondary classifications:

Audounet, Jacques (*with* Bancel, Daniel) Ensembles à bord spatial d'une variété lorentzienne. (English summary) **(80k:53096)**

Bancel, Daniel *See* **Audounet, Jacques, (80k:53096)**

Lichnewsky, Alain (*with* Temam, Roger) Pseudosolutions of the time-dependent minimal surface problem. **(80a:35059)**

Serrin, James *See* **Weinberger, H. F., (80d:73106)**

Temam, Roger *See* **Lichnewsky, Alain, (80a:35059)**

Weinberger, H. F. (*with* Serrin, James) Optimal shapes for brittle beams under torsion. (Russian summary) **(80d:73106)**

49Gxx Variational methods for eigenvalues [See also 47A70.]

49G05 Variational approach to eigenvalues

Barnes, Earl R. Dual variational inequalities for extremal eigenvalue problems. **80e:49030**

Bickford, William B. Lower bounds to eigenvalues of piecewise continuous elastic systems. (German summary) **80f:49027**

Embergenov, A. *See* **Meredov, H. M., 80e:49033**

Friedland, Shmuel Extremal eigenvalue problems defined for certain classes of functions. **80c:49034**

Extremal eigenvalue problems. **80e:49031**

Geradin, M. Application of the biorthogonal Lanczos algorithm. **80e:49032**

Gerlich, Gerhard *See* **Sölter, G.-U.; et al., 80e:49034**

Kohler-Jobin, Marie-Thérèse Une méthode de comparaison isopérimétrique de fonctionnelles de domaines de la physique mathématique. I. Une démonstration de la conjecture isopérimétrique $P\lambda^2 > \pi j_0^4/2$ de Pólya et Szegő. (English summary) **80f:49028a**

Une méthode de comparaison isopérimétrique de fonctionnelles de domaines de la physique mathématique. II. Cas inhomogène: une inégalité isopérimétrique entre la fréquence fondamentale d'une membrane et l'énergie d'équilibre d'un problème de Poisson. (English summary) **80f:49028b**

Kolata, William G. Approximation in variationally posed eigenvalue problems. **80a:49077**

Kolomý, Josef Some methods for finding of eigenvalues and eigenvectors of linear and nonlinear operators. **80f:49037**

Kučera, Milan A new method for obtaining eigenvalues of variational inequalities. Branches of eigenvalues of the equation with the penalty in a special case. (Czech and Russian summaries) **80f:49038**

Meredov, H. M. (*with* Embergenov, A.) Numerical determination of upper bounds on natural oscillation frequencies of a polygonal membrane. (Russian. Turkmen and English summaries) **80e:49033**

Müller, A. M. K. *See* **Sölter, G.-U.; et al., 80e:49034**

Müller, Peter C. Oscillatory damped linear systems. **80h:49026**

Puel, J.-P. A free boundary, nonlinear eigenvalue problem. **80b:49036**

Schwarzmeier, James L. (*with* Symon, Keith R.) Variational nature of eigenvalue problems with a parameter. **80c:49035**

Sölter, G.-U. (*with* Müller, A. M. K.; Gerlich, Gerhard) Ein Variationsprinzip zur Einschachtelung von Eigenwerten. (English summary) **80e:49034**

Sperb, René (*with* Stakgold, Ivar) Estimates for membranes of varying density. **80e:49035**

Stakgold, Ivar *See* **Sperb, René, 80e:49035**

Symon, Keith R. *See* **Schwarzmeier, James L., 80c:49035**

Secondary classifications:

Bader, Peter Variational method for the Hartree equation of the helium atom. **(80d:81037)**

Baxter, R. J. Variational approximations for square lattice models in statistical mechanics. **(80c:82041)**

Castellani Rizzonelli, Pieranita The computation of the eigenfrequencies of an elastic body with a free boundary and with discontinuous elastic coefficients. (Italian. English summary) **(80c:73021)**

DeTar, C. E. (*with* Low, F. E.) Variational principles for complex eigenvalues. **(80d:85010)**

Dhaliwal, Ranjit S. *See* **Khan, M. Saleem, (80d:73088)**

Galbe, G. (*with* Meziere, Y.) Remarques sur les coefficients de Timoshenko. **(80i:73031)**

Gallot, Sylvestre Un théorème de pincement et une estimation sur la première valeur propre du laplacien d'une variété riemannienne. (English summary) **(80j:53045)**

Helleman, Robert H. G. Variational solutions of non-integrable systems. **(80d:70036)**

Khan, M. Saleem (*with* Dhaliwal, Ranjit S.) Bounds to the eigenvalues of rectangular plates. **(80d:73088)**

Ladevèze, J. (*with* Ladevèze, P.) Majorations de la constante de Poincaré relative au problème de la membrane domaines étoilés. **(80a:35056)**

(*with* Ladevèze, P.) Lower bounds for the fundamental free membrane eigenvalue. **(80m:35059)**

Ladevèze, P. *See* **Ladevèze, J., (80a:35056)** *and* **Ladevèze, J., (80m:35059)**

Low, F. E. *See* **DeTar, C. E., (80d:85010)**

Mahmudov, A. P. A generalized quasilinear eigenvalue problem. (Russian) **(80a:65119)**

Meziere, Y. *See* **Galbe, G., (80i:73031)**

Rebiere, J. P. (*with* Sahraoui, S.) Parametric resonance by combined frequencies of cantilever bars under periodic axial load by the elastic-joint-method. **(80d:73076)**

Sahraoui, S. *See* **Rebiere, J. P., (80d:73076)**

Schreyer, Howard L. *See* **Shih, Pen Yuan, (80e:73025)**

Sebakhy, O. A. (*with* Sorial, N. N.) Optimization of linear multivariable systems with prespecified closed-loop eigenvalues. **(80c:93110)**

Shih, Pen Yuan (*with* Schreyer, Howard L.) Lower bounds to fundamental frequencies and buckling loads of columns and plates. **(80e:73025)**

Slepjan, L. I. Betti theorem and orthogonality relations for eigenfunctions. **(80k:73030)**

Sorial, N. N. *See* **Sebakhy, O. A., (80c:93110)**

Stachó, L. L. On curvature measures. **(80j:53065)**

Villaggio, Piero Buckling under unilateral constraints. **(80b:73033)**

49G10 Rayleigh-Ritz methods

Esposito, Anna (*with* Romano, Manfredi) Error estimates for eigenvector approximation in the theory of elastic vibrations. (Italian summary) **80e:49036**

Romano, Manfredi *See* **Esposito, Anna, 80e:49036**

Tomescu, Anca Trial functions for the Dirichlet problem of the Poisson equation in polygonal domains. (French and German summaries) **80j:49041**

Secondary classifications:

Samuelsson, A. The global constant strain condition and the patch test. **(80g:73054)**

49G15 Weinstein and Aronszajn methods, intermediate problems

Weinstein, Alexander On intermediate eigenvalue problems, maximum-minimum theory and Kolmogorov-Karlovitz *n*-widths. (Russian summary) **80d:49033**

49G20 Linear operators in Hilbert spaces

Horgan, C. O. Eigenvalue estimates and the trace theorem. **80f:49029**

Robinson, Peter D. Bivariational bounds. **80e:49037**

Secondary classifications:

Binding, Paul (*with* Browne, Patrick J.) A variational approach to multi-parameter eigenvalue problems in Hilbert space. **(80a:47030)**

Browne, Patrick J. *See* **Binding, Paul, (80a:47030)**

Karrasalo, Ilkka Stability of axisymmetric annular fluid interfaces at zero contact angle. **(80d:76037)**

49G99 None of the above, but in this section

Feinberg, Jerry M. Some Wirtinger-like inequalities. **80j:49042**

Secondary classifications:

Cohen, Maurice (*with* Feldmann, Tova) A generalisation of Temple's lower bound to eigenvalues. **(80e:81031)**

Derfman, I. Ja. Formal calculus of variations in the algebra of smooth cylindrical functions. (Russian) **(80a:35110)**

Feldmann, Tova *See* **Cohen, Maurice, (80e:81031)**

Goerisch, Friedrich Über Quotienten-Einschliessungssätze bei allgemeinen Eigenwertaufgaben. (English summary) **(80j:65022)**

49H05 Variational principles of physics [See also 70–XX, 81–XX.]

Aldersley, S. J. Higher Euler operators and some of their applications. **80b:49037**

Bufler, H. Generalized variational principles with relaxed continuity requirements for certain nonlinear problems, with an application to nonlinear elasticity. **80e:49038**

Janson, Svante Fast tunnels. (Swedish. English summary) **80m:49034**

Javrijan, A. N. *See* **Perrote, A. I., 80k:49027**

Komkov, Vadim Another look at the dual variational principles. **80e:49039**

Lichnewsky, Alain Sur un problème du calcul des variations intervenant dans l'étude de la plasticité. (English summary) **80c:49036**

McKinley, John M. Brachistochrones, tautochrones, evolutes, and tessellations. **80d:49034**

Noble, B. *See* **Sewell, M. J., 80e:49040**

Perrote, A. I. (*with* Javrijan, A. N.) The principle of least action in reliability theory. **80k:49027**

Sewell, M. J. (*with* Noble, B.) General estimates for linear functionals in nonlinear problems. **80e:49040**

Vanderbauwhede, André L. Potential operators and variational principles: a generalization. **80e:49041**

Veličenko, V. V. Minimal interpretation of the least action principle. (Russian) **80m:49035**

Yourgrau, W. The enigmatic role of variational principles in theoretical physics. **80j:49043**

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Abovskiĭ, N. P. (*with* Andreev, N. P.; Deruga, A. P.) ★Вариационные принципы теории упругости и теории оболочек. (Russian) [Variational principles of the theory of elasticity and the theory of shells] **(80g:73056)**

Aljadin, P. V. Optimization of beams and plates on an elastic base according to the criterion of maximum rigidity. (Russian) **(80f:73053)**

Alt, Hans Wilhelm Strömungen durch inhomogene poröse Medien mit freiem Rand. **(80d:76086)**

Anderson, D. (*with* Bonnedal, M.) Variational approach to nonlinear self-focusing of Gaussian laser beams. **(80a:78003)**

Anderson, N. (*with* Arthurs, A. M.) A variational principle for Maxwell's equations. **(80b:78001)**

(*with* Arthurs, A. M.) Complementary variational principles for a class of nonlinear boundary value problems. **(80e:49025)**

Andreev, N. P. *See* **Abovskiĭ, N. P.; et al., (80g:73056)**

Aronsson, Gunnar An integral inequality and plastic torsion. **(80g:49003)**

Arthurs, A. M. *See* **Anderson, N., (80b:78001)** *and* **Anderson, N., (80e:49025)**

Asséo, E. (*with* Cesarsky, C. J.; Lachièze-Rey, M.; Pellat, R.) Parker instability in the presence of curved magnetic field lines. **(80c:76061)**

Banĭchuk, N. V. (*with* Kartvelišvili, V. M.; Mironov, A. A.) Optimization problems with local performance criteria in the theory of plate bending. **(80f:73054)**

Batalin, I. A. (*with* Fradkin, E. S.) Compensating functional and quantization of relativistic constrained systems. **(80k:81036)**

Beckert, Herbert Bemerkungen zur Theorie der Stabilität. **(80b:34054)**

Beĭl'kin, G. Ja. Explicit solution of the inverse kinematic problem in the non-Herglotz case. (Russian. English summary) **(80g:86008)**

Biot, M. A. New variational-Lagrangian thermodynamics of viscous fluid mixtures with thermomolecular diffusion. **(80h:80001)**

Bonnedal, M. *See* **Anderson, D., (80a:78003)**

Burysiewicz, M. (*with* Stankiewicz, Roman) Variational formulation and projectional methods for the second-order transport equation. **(80i:82032)**

Brana, Josip (*with* Ljolje, Krunoslav) Lagrangian formalism for electromagnetic field in spinor notation. (Serbo-Croatian summary) **(80d:78007)**

Buchdahl, H. A. Quadratic Lagrangians and Palatini's device. **(80c:83034)**

Bufler, H. Zur Struktur der Gleichungen der Elastokinetik und Elastostabilität. (English and Russian summaries) **(80d:73075)**

Čan Dyk Čung (*with* Nguen Zung) Some problems on the optimization of rods. (Russian) **(80k:73044)**

Cant, R. J. The effective potential, vacuum tunnelling and the $1/N$ expansion. **(80h:81075)**

Cesarsky, C. J. *See* **Asséo, E.; et al., (80c:76061)**

Česnokov, S. S. *See* **Voroncov, M. A., (80k:78006)**

Ciarlet, Philippe G. (*with* Destuynder, Philippe) A justification of the two-dimensional linear plate model. (French summary) **(80e:73046)**

Clavaldini, Jean-François (*with* Pogu, Marc; Tournemine, Georges) Sur l'existence et l'unicité d'écoulements compressibles autour d'un profit en présence de parois à perméabilité variable. (English summary) **(80h:76009a)**

Courrège, Philippe (*with* Lasry, Jean Michel) Contribution à l'étude des champs d'héliostats des centrales solaires à concentration ponctuelle. **(80h:86004)**

Denisk, S. A. *See* **Ferronskiĭ, V. I.; et al., (80f:70010)**

Deruga, A. P. *See* **Abovskiĭ, N. P.; et al., (80g:73056)**

Destuynder, Philippe *See* **Ciarlet, Philippe G., (80e:73046)**

Dominici, D. A composite system of three relativistic particles with half-integer total angular momentum. **(80g:81011)**

Dörre, P. (*with* Haug, H.; Heise, M.; Jelitto, R. J.) On quantum statistical variational principles. **(80f:82004)**

Dost, S. (*with* Tabarrok, B.) Application of Hamilton's principle to large deformation and flow problems. **(80c:73003)**

Drabowicz, W. Motion equations of an electron gas. **(80m:83032)**

Đukić, Đorđe S. On the brachistochronic motion of a dynamic system. **(80d:70023)**

Elsen, Goswin A selection lemma for sequences of measurable sets, and lower semicontinuity of multiple integrals. **(80h:28004)**

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Gottlieb, Hans P. W. Harmonic properties of the annular membrane. **(80f:73035)**

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(Marsden, Jerrold E.) *See* **Geometric methods in mathematical physics, (80g:83001)**

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Mindlin, R. D. A variational principle for the equations of piezoelectromagnetism in a compound continuum. (Russian summary) **(80a:73061)**

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Reitman, M. I. (*with* Šapiro, G. S.) Optimal design of solid deformable bodies. (Russian) **(80g:73004)**
(Rodin, Ervin Y.) *See* **Energy methods in finite element analysis, (80d:73100)**
Rozin, L. A. ★Вариационные постановки задач для упругих систем. (Russian) [Variational formulations of problems for elastic systems] **(80g:73006)**
Šapiro, G. S. *See* **Reitman, M. I., (80g:73004)**
Scharle, P. An example for constructing the variational (energetic) error principle. (German and Russian summaries) **(80j:73013)**
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Voroncov, M. A. (*with* Česnokov, S. S.) Optimization of light beam focusing in moving nonlinear media. (Russian. English summary) **(80k:78006)**
Vorovič, I. I. Resonance properties of an elastic inhomogeneous band. (Russian) **(80h:73024)**
Wald, Robert M. Note on the stability of the Schwarzschild metric. **(80c:83012a)**
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Conference:
NSF-CBMS, Geometric Methods in Mathematical Physics *See* **Geometric methods in mathematical physics, (80g:83001)**
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Finite element analysis *See* **Energy methods in finite element analysis, (80d:73100)**
Geometric methods in mathematical physics ★Geometric methods in mathematical physics. **(80g:83001)**
Lowell, Mass. *See* **Geometric methods in mathematical physics, (80g:83001)**
Mathematical physics *See* **Geometric methods in mathematical physics, (80g:83001)**

51–XX GEOMETRY {For algebraic geometry, see 14–XX.}

51–01 Elementary exposition, textbooks

Böhm, J. (*with* Börner, W.; Hertel, E.; Krötenheerdt, Otto; Mögling, W.; Stammler, Ludwig) ★Geometrie. II. **80h:51001**
Börner, W. *See* **Böhm, J.; et al., 80h:51001**
Fischer, Gerd ★Analytische Geometrie. **80a:51001**
Hertel, E. *See* **Böhm, J.; et al., 80h:51001**
Ieiki, Kiyoshi ★Non-Greek mathematics. **80f:51001**
Klotzek, B. (*with* Quaisser, Erhard) ★Nichteuklidische Geometrie. **80i:51001**
Krötenheerdt, Otto *See* **Böhm, J.; et al., 80h:51001**
Mögling, W. *See* **Böhm, J.; et al., 80h:51001**
Pedoe, D. ★Circles. **80k:51001**
Quaisser, Erhard *See* **Klotzek, B., 80i:51001**
Stammler, Ludwig *See* **Böhm, J.; et al., 80h:51001**

Secondary classifications:

Faux, Ivor D. (*with* Pratt, Michael J.) ★Computational geometry for design and manufacture. **(80d:68134)**
Jantosciak, James *See* **Prenowitz, Walter, (80c:52001)**
Pedersen, Jean J. Visualising parallel divisions of space. **(80f:52009)**
Pratt, Michael J. *See* **Faux, Ivor D., (80d:68134)**
Prenowitz, Walter (*with* Jantosciak, James) ★Join geometries. **(80c:52001)**

51–02 Advanced exposition (research surveys, monographs, etc.)

Fisher, J. C. Geometry according to Euclid. **80g:51001**

51–03 Historical (must also be assigned at least one classification number from Section 01)

Coxeter, Harold Scott MacDonald Parallel lines. **80c:51001**
(Mannoury, Gerrit) *See* **van der Waerden, B. L., 80i:51002**
Strommer, Gyula The construction theory in the Bolyai geometry. (Hungarian) **80d:51001**
van der Waerden, B. L. Gerrit Mannoury and his "surfaces-images". **80i:51002**

Secondary classifications:

Apollonius ★Απολλωνιου Κωνικα. Τομοσ Α'. (Greek) [Apollonios: Conics. Vol. 1] **(80g:01036a)**
★Απολλωνιου Κωνικα. Τομοσ Β'. (Greek) [Apollonios: Conics. Vol. 2] **(80g:01036b)**
★Απολλωνιου Κωνικα. Τομοσ Γ'. (Greek) [Apollonios: Conics. Vol. 3] **(80g:01036c)**
★Απολλωνιου Κωνικα. Τομοσ Δ'. (Greek) [Apollonios: Conics. Vol. 4] **(80g:01036d)**
Baker, Justine C. *See* **Oakley, Cletus O., (80i:01012)**
(van den Berg, F. J.) *See* **Bottema, O., (80k:01030)**
Bottema, O. A theorem of F. J. van den Berg (1833–1892). **(80k:01030)**
Brigingshaw, A. J. The axiomatic geometry of space-time: an assessment of the work of A. A. Robb. **(80d:01015)**
Gray, Jeremy Non-Euclidean geometry—a re-interpretation. (French and German summaries) **(80h:01017)**
Halamelsär, Alexander (*with* Seibt, Helmut) ★Nikolai Iwanowitsch Lobatschewski. (German) **(80k:01054)**
Hamada, Toshio *See* **Ōyama, Makoto; et al., (80c:01001)**
Iizuka, Masaaki *See* **Ōyama, Makoto; et al., (80c:01001)**
Ieiki, Kiyoshi Non-Greek, nonstandard objects in mathematics. **(80d:01026)**
Kobayashi, Tatsuhiko *See* **Ōyama, Makoto; et al., (80c:01001)** *and* **Michiwaki, Yoshimasa; et al., (80f:01004)**
(Liu Hui) *See* **Wagner, Donald Blackmore, (80e:01001)**
(Lobačevskiĭ, N. I.) *See* **Halamelsär, Alexander; et al., (80k:01054)**
Matsuzaki, Toshio The deficient sphere formula described in *Jugai-roku*. (Japanese) **(80k:01015)**
On *San-pō ketsugi shō*. (Japanese) **(80k:01016)**
Michiwaki, Yoshimasa (*with* Kobayashi, Tatsuhiko; Ōyama, Makoto; Tanaka, Kaoru) On the cycloids in the old Japanese mathematics. **(80f:01004)**
See also **Ōyama, Makoto; et al., (80c:01001)**
Oakley, Cletus O. (*with* Baker, Justine C.) The Morley trisector theorem. **(80i:01012)**
Ōtake, Shigeo *See* **Ōyama, Makoto; et al., (80c:01001)**
Ōyama, Makoto (*with* Hamada, Toshio; Iizuka, Masaaki; Ōtake, Shigeo; Kobayashi, Tatsuhiko; Tanaka, Kaoru; Tanaka, Mitsuru; Michiwaki, Yoshimasa) Elliptic problems occurring in "sangaku". (Japanese) **(80c:01001)**
See also **Michiwaki, Yoshimasa; et al., (80f:01004)**
(Peano, Giuseppe) *See* **Pedrazzi, Maino, (80f:01015)**
Pedrazzi, Maino Axiomatic systems in the work of Giuseppe Peano and his school. (Italian. English summary) **(80f:01015)**
(Robb, A. A.) *See* **Brigingshaw, A. J., (80d:01015)**
Seibt, Helmut *See* **Halamelsär, Alexander, (80k:01054)**
Shimodaira, Kazuo On the formulas for arc, arrow and chord in the early period of the Tokugawa shōgunate. (Japanese) **(80f:01005)**
(Stamatis, Evangelos S.) *See* **Apollonius, (80g:01036a); Apollonius, (80g:01036b); Apollonius, (80g:01036c)** *and* **Apollonius, (80g:01036d)**
Tanaka, Kaoru *See* **Ōyama, Makoto; et al., (80c:01001)** *and* **Michiwaki, Yoshimasa; et al., (80f:01004)**
Tanaka, Mitsuru *See* **Ōyama, Makoto; et al., (80c:01001)**
Torretti, Roberto ★Philosophy of geometry from Riemann to Poincaré. **(80k:01021)**
Vestergaard, P. D. How long is the chord? (Bertrand's paradox). (Danish. English summary) **(80i:60015)**
Wagner, Donald Blackmore An early Chinese derivation of the volume of a pyramid: Liu Hui, third century A.D. (German summary) **(80e:01001)**
Bibliography:
Robb, A. A. *See* **Brigingshaw, A. J., (80d:01015)**
Biography:
Lobačevskiĭ, Nikolai Ivanovič *See* **Halamelsär, Alexander; et al., (80k:01054)**
Conics *See* **Apollonius, (80g:01036a); Apollonius, (80g:01036b); Apollonius, (80g:01036c)** *and* **Apollonius, (80g:01036d)**

51–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

Boulitz, Peter Ein Beitrag zur Theorie des Entwurfs doppelt gekrümmter Flächen unter differentialgeometrischen und rechentechnischen Aspekten. **(80e:53002)**
Buthion, M. Un programme qui résout formellement des problèmes de constructions géométriques. (English summary) **(80c:68066)**
Chasen, Sylvan H. ★Geometric principles and procedures for computer graphic applications. **(80j:68001)**
Deák, I. Comparison of methods for generating uniformly distributed random points in and on a hypersphere. (Russian summary) **(80h:65003)**
Langlet, G. A. A new fast direct solution to the problem of the sphere tangent to four spheres. **(80i:51026)**
Lee, D. T. (*with* Preparata, Franco P.) An optimal algorithm for finding the kernel of a polygon. **(80e:68113)**
Preparata, Franco P. *See* **Lee, D. T., (80e:68113)**

51–06 Proceedings, conferences, etc.

Gaussig *See* **Vorträge: Geometrie und Anwendungen, 80d:51002**
Geometry *See* **Vorträge: Geometrie und Anwendungen, 80d:51002**
Tagung:
Geometrie und Anwendungen *See* **Vorträge: Geometrie und Anwendungen, 80d:51002**

Vorträge:
Geometrie und Anwendungen ★Vorträge von der Tagung Geometrie und Anwendungen. **80d:51002**

51Axx Linear incidence geometry

51A05 General theory and projective geometries

Bartolone, Claudio (*with* Di Franco, Fabio) A remark on the projectivities of the projective line over a commutative ring. **80m:51001**
Di Franco, Fabio *See* **Bartolone, Claudio, 80m:51001**
Groze, Victoria (*with* Vasiu, Angela) A system of axioms for the 4-dimensional projective space. **80h:51002**
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Kur'jakov, M. M. Pseudoplanes and generalized pseudoternary rings. (Russian) **80g:51002**
Kuznecova, V. A. *See* **Rozenfel'd, B. A.; et al., 80j:51001**
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Sprague, Alan P. Incidence structures with specified planes. **80b:51001**
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Secondary classifications:

Stoljarova, L. P. Mapping of the manifold of space quartics at points of P_4. (Russian) **(80m:14019)**

51A10 Homomorphism, automorphism and dualities

Baker, Ronald D. Polarities of elliptic semiplanes. **80g:51003**
Machala, František Homomorphismen und Pseudohomomorphismen der Ternärringe und Homomorphismen schwacher Pseudoebenen. (Russian and Czech summaries) **80j:51002**

Secondary classifications:

Dugas, Manfred Verallgemeinerte André-Ebenen mit Epimorphismen auf Hjelmslev-Ebenen. **(80h:51008)**

51A15 Structures with parallelism

Arnold, Hans-Joachim Über die Struktur der in zwei Punkten homogenen, distributiven Spernerschen Räume unter besonderer Berücksichtigung ihrer Fernräume. **80c:51002**
Beutelspacher, Albrecht Parallelismen in unendlichen projektiven Räumen endlicher Dimension. **80a:51002**
Biliotti, Mauro The lattice of subspaces of an S-space of translations passing through a point. (Italian. English summary) **80a:51003**
Thiele, Helmut Gewebe, deren Ternärkörper aus einem Vektorraum hervorgeht. **80i:51003**

Secondary classifications:

Bachmann, Otto Über die Gruppenräume transitiver Permutationsgruppen. **(80m:51002)**

51A20 Configuration theorems

Bodil, Hermann The cubes. **80e:51001**
Krys, Jaromír Configurations in the space A_{mk} that are derived via configurations in the space A_k. (Czech. German summary) **80c:51003**
Lewandowski, Andrzej (*with* Makowiecka, Hanna) Some remarks on Havlíček-Tietze configuration. **80g:51004**
Makowiecka, Hanna *See* **Lewandowski, Andrzej, 80g:51004**
Mengersen, Ingrid Vierseitige Flächen in Geradenanordnungen. **80d:51003**
Purdy, George B. (*with* Strommer, Thomas O.) The maximal sizes of faces and vertices in an arrangement. **80j:51003**
Rottero, Aldo On certain projective invariants of n collinear points. (Italian. English and French summaries) **80j:51004**
Strommer, Thomas O. *See* **Purdy, George B., 80j:51003**

Secondary classifications:

Belousov, V. D. ★Конфигурации в алгебраических сетях. (Russian) [Configurations in algebraic nets] **(80k:20074)**
Conway, John H. (*with* Croft, H. T.; Erdős, Paul; Guy, M. J. T.) On the distribution of values of angles determined by coplanar points. **(80h:51021)**
Croft, H. T. *See* **Conway, John H.; et al., (80h:51021)**
Erdős, Paul *See* **Conway, John H.; et al., (80h:51021)**
Guy, M. J. T. *See* **Conway, John H.; et al., (80h:51021)**
Hoggar, S. G. Bounds for quaternionic line systems and reflection groups. **(80k:94032)**

51A25 Algebraization [See also 12Kxx, 20N10.]

Buchmann, Otto Über die Gruppenräume transitiver Permutationsgruppen. **80m:51002**
Faina, Giorgio On the double loop associated with an oval. (Italian. English summary) **80d:51004**

Secondary classifications:

Schaeffer, Helmut Eine Winkelmetrik zur Begründung euklidisch-metrischer Ebenen. (English summary) **(80h:51006)**
Schwabhäuser, Wolfram Modellvollständigkeit der Mittelpunktsgeometrie und der Theorie der Vektorgruppen. **(80i:03022)**

51A30 Desarguesian and Pappian geometries

Hotje, Herbert Zur Definition des Flächeninhalts in affinen Ebenen. **80g:51005**
Lopez Rodriguez-Moldes, M.ª E. (*with* Villanueva Nóvoa, E.) A property of the pentagon in axiomatic geometry. (Spanish) **80f:51002**
Medek, Václav Über eine Eigenschaft von Ovalen. (Russian summary) **80a:51004**
Otto, Edward Pappus'sche Eigenschaft des Linienraumes. **80m:51003**
Villanueva Nóvoa, E. *See* **Lopez Rodriguez-Moldes, M.ª E., 80f:51002**

51A35 Non-Desarguesian affine and projective planes

Dembowski, R. H. F. Some non-Desarguesian translation ovals. **80g:51006**
Garner, Cyril W. L. Conics in finite projective planes. **80c:51004**
Havel, Václav (*with* Studnička, Ivan) Bemerkung über gemeinsame Beziehung zwischen kartesischen Gruppen und kartesischen Zahlensystemen. (Czech summary) **80a:51005**
Kelly, Graham Generalization of a theorem due to Kopejkina. **80c:51005**
Ott, Udo Fahnentransitive Ebenen ungerader Ordnung. **80h:51003**
Salzmann, Helmut Automorphismengruppen 8-dimensionaler Ternärkörper. **80i:51004**
Studnička, Ivan *See* **Havel, Václav, 80a:51005**

Secondary classifications:

Hurtevent, Jacques (*with* Petit, Jean-Claude) Construction de plans par remplacement de secteurs. **(80k:51004)**
Petit, Jean-Claude *See* **Hurtevent, Jacques, (80k:51004)**
Pickert, Günter Biaffine Inzidenzebenen, orthogonale lateinische Quadrate und 2-Assoziationsschemata. **(80b:05012)**

51A40 Translation planes and spreads

Bhambri, S. K. *See* **Gopalakrishna, A. R., 80j:51005**
Caggegi, Andrea Generalized André planes. (Italian. English summary) **80i:51005**
Gopalakrishna, A. R. (*with* Bhambri, S. K.) Finite affine planes with primitive collineation groups. **80j:51005**
Herzer, Armin Kollineationen und Schliessungssätze für ebene Faserungen. (English summary) **80e:51002**
Liebler, Robert A. A note on the Hering-Ott planes. **80b:51002**
Lunardon, Guglielmo A classification of the translation planes in relation to all fibrations and their associates. I. (Italian. English summary) **80h:51004**
Ostrom, T. G. Translation planes of odd order and odd dimension. **80h:51005**
Pomareda, Roland J. Groups and geometry: collineations of translation planes. (Portuguese) **80d:51005**
Sherk, F. A. Indicator sets in an affine space of any dimension. **80d:51006**

Secondary classifications:

Ho, C. Y. Linear transformation and collineation of finite translation planes. **(80f:20051)**

51A45 Incidence structures imbeddable into projective geometries

Karzel, Helmut (*with* Kroll, Hans-Joachim) Zur projektiven Einbettung von Inzidenzräumen mit Eigentlichkeitsbereich. **80k:51002**
Kroll, Hans-Joachim *See* **Karzel, Helmut, 80k:51002**
Row, Don Almost-Baer subplanes of free projective planes. **80a:51006**

Secondary classifications:

Kim, Ki Hang (*with* Roush, Fred W.) A universal algebra approach to free projective planes. **(80j:08003)**
Machala, František Über projektive Erweiterung affiner Klingenbergscher Ebenen. **(80b:05017)**
de Meur, G. Espaces de Fischer hermitiens. **(80j:20003)**
Roush, Fred W. *See* **Kim, Ki Hang. (80j:08003)**
Tschupik, Josef Peter Systeme simultaner Projektionen in projektiven Räumen. **(80d:51018)**

51A99 None of the above, but in this section

Faina, Giorgio A procedure for the construction of infinite ovals. (Italian. English summary) **80h:51006**

Secondary classifications:

Fisher, J. C. Geometry according to Euclid. **(80g:51001)**

51Bxx Nonlinear incidence geometry

51B05 General theory

Fritsch, Rudolf Ein "affiner" Beweis des Satzes von v. Staudt-Schleiermacher. (English summary) **80c:51006**
Hotje, Herbert Die Algebren einbettbarer Berührstrukturen. **80h:51003**
Samaga, Hans-Joachim ($B_n^* G_n S_n$)-Geometrien. (English summary) **80e:51003**

51B10 Möbius geometries

Ebert, Gary L. Amusing configurations of disjoint circles. **80h:51007**
Hartmann, Erich Möbiusebenen über pythagoreischen Körpern. **80d:51007**
Krier, Nicholas Some constructions of infinite Möbius planes. **80i:51006**
Yaqub, Jill C. D. S. The nonexistence of Möbius planes of Hering class VI2. **80j:51006**

51B15 Laguerre geometries

Hartmann, Erich Eine Klasse nicht einbettbarer reeller Laguerre-Ebenen. (English summary) **80j:51007**
Mäurer, Helmut Involutorische Automorphismen von Laguerre-Ebenen mit genau zwei Fixpunkten. (English summary) **80d:51008**

Secondary classifications:

Geck, Renate R. The nonexistence of optimal $(q+2, 3)$-codes of order $q=5$ and $q=7$. **(80m:94058)**

51B20 Minkowski geometries

Benz, Walter A characterization of plane Lorentz transformations. **80b:51004**
Farrahi, Bijan On cone preserving transformations of metric affine spaces. **80j:51008**
(Gordon, Basil) *See* **Jaglom, I. M., 80c:51007**
Jaglom, I. M. ★A simple non-Euclidean geometry and its physical basis. **80c:51007**
Kersten, Sibylle ★Untersuchungen zum Aufbau einer vierdimensionalen *minkowskischen Geometrie aus dem Spiegelungsbegriff*. **80m:51004**
Percsy, Nicolas A remark on the introduction of coordinates in Minkowski planes. **80d:51009**
(Shenitzer, Abe) *See* **Jaglom, I. M., 80c:51007**

Secondary classifications:

Akama, Keiichi An attempt at pregeometry. Gravity with composite metric. **(80a:83036)**
Buchdahl, H. A. (*with* Warner, N. P.) On the world function of the Schwarzschild field. **(80b:83014)**
Imaeda, K. Quaternionic formulation of tachyons, superluminal transformations and a complex space-time. (Italian and Russian summaries) **(80d:83004)**
Kamefuchi, S. *See* **Kamoi, K., (80c:83022)**
Kamoi, K. (*with* Kamefuchi, S.) Tachyons as viewed from quantum field theory. **(80c:83022)**
Lake, Kayll Note on degenerate Killing horizons. **(80g:83015)**
Lindström, Ulf Zeeman topologies for space-time. **(80k:83002)**
Mignani, Roberto Quaternions and Lorentz transformations. **(80e:83003)**
Montesinos, Angel Geometry of spacetime founded on spacelike metric. **(80g:83003)**
Noll, Walter (*with* Schäffer, Juan Jorge) Order-isomorphisms in affine spaces. **(80j:51015)**
Pappas, P. T. The "three-dimensional time" equation. **(80k:81231)**
Samaga, Hans-Joachim ($B_n^* G_n S_n$)-Geometrien. (English summary) **(80e:51003)**
Schäffer, Juan Jorge *See* **Noll, Walter, (80j:51015)**
Stelb, Michael Lee A bounded velocity postulate and special relativity. **(80d:83006)**
Strnad, Janez The Lorentz transformation—graphically. (Slovenian) **(80k:83004)**
Warner, N. P. *See* **Buchdahl, H. A., (80k:83014)**
Zaripov, R. G. On the definition of simultaneity in special relativity theory. (Russian) **(80d:83007)**
Zilso, G. On the theoretical reliability of a three-temporal Lorentz transformation. **(80a:83013)**

51B25 Lie geometries

Secondary classifications:

Bilinski, Stanko Funktionale von primitiven Polygonen Kleinscher Ebenen. **(80i:51025)**

51B99 None of the above, but in this section

Valette, G. Benz planes with pairwise secant circles. **80i:51007**

51C05 Ring geometry (Hjelmslev, Barbilian, etc.)

Bachmann, Friedrich Eine neuere Entwicklung in der ebenen metrischen Geometrie. **80c:51008**
Benz, Walter On Barbilian domains over commutative rings. **80d:51010**
Crombeim, Arno Dual numbers, Witt vectors, and Hjelmslev planes. **80c:51009**
Dugas, Manfred Verallgemeinerte André-Ebenen mit Epimorphismen auf Hjelmslev-Ebenen. **80h:51008**
Jungnickel, Dieter Regular Hjelmslev planes. II. **80j:51009b**
Regular Hjelmslev planes. **80j:51009a**
Knüppel, Frieder Lotketten in speziellen Hjelmslev-Gruppen. (English summary) **80c:51010**
(*with* Kunze, Michael) Neighbor relation and neighbor homomorphism of Hjelmslev groups. **80i:51008**
Kunze, Michael *See* **Knüppel, Frieder, 80i:51008**
Lorimer, J. W. Connectedness in topological Hjelmslev planes. **80i:51009**
Miron, R. The minimality of Weyl's system of axioms for the affine geometry over an unitary ring. **80a:51007**

Secondary classifications:

Brungs, H. H. (*with* Törner, Günter) Embedding right chain rings in chain rings. **(80a:16009)**
Ruegg, H. Octonionic quark confinement. **(80d:81049)**
Törner, Günter *See* **Brungs, H. H., (80a:16009)**

51Dxx Geometric closure systems

51D05 Abstract (Maeda) geometries

Secondary classifications:

Pasini, Antonio Model-theoretic approach to geometries. **(80j:03051)**

51D10 Abstract geometries with exchange axiom

51D15 Abstract geometries with parallelism

Halder, Heinz-Richard Produktbildung von Inzidenzräumen mit Parallelismus. **80c:51011**
Herzer, Armin Translationsstrukturen, die weder axial noch zentral sind. **80k:51003**
Quaisser, Erhard Spiegelungsgeometrische Darstellungen der desarguesschen Ebenen mit Fano-Axiom. (Russian and English summaries) **80g:51007**

Secondary classifications:

Arnold, Hans-Joachim Über die Struktur der in zwei Punkten homogenen, distributiven Spernerschen Räume unter besonderer Berücksichtigung ihrer Fernräume. **(80c:51002)**

51D20 Combinatorial geometries [See also 05B25.]

Tverberg, Helge Squaring the square and other combinatorial geometry. I. (Norwegian. English summary) **80g:51008a**
Squaring the square and other combinatorial geometry. II. (Norwegian. English summary) **80g:51008b**

Secondary classifications:

Cordovil, R. (*with* Las Vergnas, Michel) Géometries simpliciales unimodulaires. **(80j:05039)**
Las Vergnas, Michel *See* **Cordovil, R., (80j:05039)**

51D25 Lattices of subspaces [See also 05B35.]

Harrison, D. K. Double coset and orbit spaces. **80j:51010**
Kantor, William M. Locally polar lattices. **80e:51004**

51D30 Continuous geometries and related topics

Secondary classifications:

Harrison, D. K. Double coset and orbit spaces. **(80j:51010)**

51D99 None of the above, but in this section

Brânzei, Dan On some categories of Miron spaces. **80i:51010**
Mäurer, Helmut Perspektive Involutionen in der Geometrie der quadratischen Polynome. **80h:51009**

Secondary classifications:

Kim, Ki Hang (*with* Roush, Fred W.) A universal algebra approach to free projective planes. **(80j:08003)**
Roush, Fred W. *See* **Kim, Ki Hang, (80j:08003)**

51Exx Finite geometry

Secondary classifications:

Chan, Agnes Hui (*with* Ray-Chaudhuri, Dijen K.) Characterization of "linegraph of an affine space". **(80m:05020)**
Ray-Chaudhuri, Dijen K. *See* **Chan, Agnes Hui, (80m:05020)**

51E05 General block designs [See also 05B05.]

Secondary classifications:

Baker, Ronald D. An elliptic semiplane. **(80a:05047)**
Jungnickel, Dieter On an assertion of Dembowski. **(80e:05041)**
van Lint, Jacobus H. Ovales et codages. **(80j:05018)**

51E10 Steiner systems

Doyen, Jean (*with* Rosa, Alexander) An extended bibliography and survey of Steiner systems. **80g:51009**
Rosa, Alexander *See* **Doyen, Jean, 80g:51009**
Teirlinck, Luc On Steiner spaces. **80j:51011**
Bibliography:
Steiner systems *See* **Doyen, Jean; et al., 80g:51009**

Secondary classifications:

Dehon, Michel Planar Steiner triple systems. **(80b:05015)**
Doyen, Jean (*with* Hubaut, Xavier; Vandensavel, Monique) Ranks of incidence matrices of Steiner triple systems. **(80h:05012)**
Drake, David A. (*with* Jungnickel, Dieter) Klingenberg structures and partial designs. I. Congruence relations and solutions. **(80d:05017a)**
Greenwell, Don (*with* Lindner, Charles C.) Some remarks on resolvable Steiner quadruple systems. **(80j:05016)**
Hubaut, Xavier *See* **Doyen, Jean; et al., (80h:05012)**
Jungnickel, Dieter *See* **Drake, David A., (80d:05017a)**

Köhler, Egmont *Zyklische Quadrupelsysteme.* **(80g:05012)**
Lindner, Charles C. (*with* Rosa, Alexander) Steiner quadruple systems—a survey. **(80c:05055)**
See also **Greenwell, Don, (80j:05016)**
Rosa, Alexander *See* **Lindner, Charles C., (80c:05055)**
Vandensavel, Monique *See* **Doyen, Jean; et al., (80b:05012)**

51E15 Affine and projective planes

Belousov, V. D. A class of algebraic nets. (Russian) **80i:51011**
Cater, F. S. On Desarguesian projective planes. **80e:51005**
Golovko, I. A. Fano configurations in k-nets. (Russian) **80h:51010**
Hurtevent, Jacques (*with* Petit, Jean-Claude) Construction de plans par remplacement de secteurs. **80k:51004**
Johnson, N. L. The geometry of $GL(2, q)$ in translation planes of even order q^2. **80c:51006**
(*with* Ostrom, T. G.) The translation planes of order 16 that admit PSL(2, 7). **80h:51011**
Korchmáros, Gabrielle On translation ovals in a Galois plane of even order. (Italian. English summary) **80i:51012**
A group property of the plane involutions that permute into themselves an oval in a finite projected plane. (Italian. English summary) **80c:51012**
Kuppuswamy Rao, K. *See* **Narayana Rao, M. L., 80g:51010**
Lewandowski, Andrzej (*with* Makowiecka, Hanna) A geometrical characterization of the projective plane of order 4. **80e:51007**
Makowiecka, Hanna *See* **Lewandowski, Andrzej, 80e:51007**
Matějková, V. Eine interessante Beziehung zwischen der Bahn eines Punktes und dem Oval. **80m:51005**
Narayana Rao, M. L. (*with* Kuppuswamy Rao, K.) A translation plane of order 25 and its full collineation group. **80g:51010**
Ostrom, T. G. *See* **Johnson, N. L., 80h:51011**
Pellegrino, Giuseppe An observation on the problem of complete k-arcs in $S_{2,q}$, with $q \equiv 1 \pmod 4$. (Italian. English summary) **80d:51011**
Petit, Jean-Claude *See* **Hurtevent, Jacques, 80k:51004**
Vincenti, Rita A transformation of a Desarguesian plane over a field of even characteristic. (Italian) **80i:51013**

Secondary classifications:

Bose, R. C. (*with* Krier, Nicholas) Note on an embeddability problem of Erdős. **(80g:05020)**
Garner, Cyril W. L. *Conics in finite projective planes.* **(80c:51004)**
Krier, Nicholas *See* **Bose, R. C., (80g:05020)**
Pellegrino, Giuseppe t-designs associated with nondegenerate conics in a Galois plane of odd order. **(80a:05027)**
Some elementary arithmetical propositions and their application to the k-arcs theory. (Italian. English summary) **(80j:05027)**

51E20 Combinatorial structures in finite projective spaces [See also 05Bxx.]

Barnabei, Marilena (*with* Zucchini, Cristina) Abstract arcs of type (m, n). (Italian. English summary) **80e:51008**
Beutelspacher, Albrecht On t-covers in finite projective spaces. **80e:51009**
Bramwell, Dennis A note on k-3 caps in three-dimensional Galois space. **80e:51010**
Häring, Martin (*with* Heise, Werner) On B. Segre's construction of an ovaloid. **80i:51014**
Heise, Werner *See* **Häring, Martin, 80i:51014**
Hill, Raymond Packing problems in Galois geometries over GF(3). **80c:51013**
Matzeu, Paola Maria Linear algebra on Galois planes. (Italian. English summary) **80k:51005**
Zucchini, Cristina *See* **Barnabei, Marilena, 80e:51008**

51E25 Finite nonlinear geometries

Garner, Cyril W. L. A finite analogue of the classical hyperbolic plane and Hjelmslev groups. **80d:51012**
Heise, Werner (*with* Quattrocchi, Pasquale) Survey on sharply k-transitive sets of permutations and Minkowski-m-structures. **80m:51006**
Kallaher, Michael J. (*with* Liebler, Robert A.) A conjecture on semifield planes. II. **80f:51003**
Laskar, Renu (*with* Thas, J. A.) On some generalizations of partial geometry. **80g:51011**
Liebler, Robert A. *See* **Kallaher, Michael J., 80f:51003**
Quattrocchi, Pasquale *See* **Heise, Werner, 80m:51006**
Thas, J. A. *See* **Laskar, Renu, 80g:51011**

51E30 Other finite incidence structures [See also 05B30.]

Hilton, A. J. W. Dimension in linear spaces. (French summary) **80g:51012**
Thas, J. A. Combinatorics of partial geometries and generalized quadrangles. **80h:51012**
Generalized quadrangles satisfying at least one of the Moufang conditions. **80i:51015**

Secondary classifications:

Lewandowski, Andrzej (*with* Makowiecka, Hanna) Some remarks on Havliček-Tietze configuration. **(80g:51004)**
Makowiecka, Hanna *See* **Lewandowski, Andrzej, (80g:51004)**

51E99 None of the above, but in this section

Boekenhout, Francis The geometry of diagrams. **80b:51005**

Secondary classifications:

Ralston, Tom *On the distribution of squares in a finite field.* **(80i:12014)**

51Fxx Metric geometry

51F05 Absolute planes

Greenberg, Marvin J. On J. Bolyai's parallel construction. **80j:51012**
Kusak, Eugeniusz Absolute planes with the Liebmann axiom. (Russian summary) **80i:51016**
Lingenberg, Rolf Vollständige metrische Ebenen. **80i:51017**

51F10 Absolute spaces

51F15 *Reflection groups, reflection geometries [See also 20H10, 20H15.]*

Brunner, G. O. (*with* Laves, F.) How many faces has the largest space-filling *polyhedron? (German summary)* **80d:51013**
Burdina, V. I. Types of stereohedra of revolution for the group 3×432. (Russian) **80h:51013**
Coxeter, Harold Scott MacDonald *See* **Huybers, Pieter, 80m:51007**
Galjarskiĭ, È. I. *See* **Zamorzaev, A. M.; et al., 80j:51013**
Giles, Jack, Jr. Infinite-level replicating dissections of plane figures. **80g:51013a**
Construction of replicating superfigures. **80g:51013b**
Superfigures replicating with polar symmetry. **80g:51013c**
Grünbaum, Branko (*with* Shephard, G. C.) *The homeomeric classification of patterns.* **80c:51014**
Huybers, Pieter (*with* Coxeter, Harold Scott MacDonald) A new approach to the chiral *Archimedean solids.* **80m:51007**
Laves, F. *See* **Brunner, G. O., 80d:51013**
Lingenberg, Rolf ★Metric planes and metric vector spaces. **80i:51018**
Palistrant, A. F. *See* **Zamorzaev, A. M.; et al., 80j:51013**
Schröder, Eberhard M. Eine Kennzeichnung der regulären euklidischen Geometrien. **80i:51019**
Shephard, G. C. *See* **Grünbaum, Branko, 80c:51014**
Zamorzaev, A. M. (*with* Galjarskiĭ, È. I.; Palistrant, A. F.) ★Цветная симметрия, ее *обобщения и приложения. (Russian) [Color symmetry, its generalizations and* applications] **80j:51013**
Zamorzaeva, E. A. Classification of regular tilings of the plane for similarity symmetry groups. (Russian) **80j:51014**

Secondary classifications:

Bacmaan, Jean-Jacques Propriétés des réseaux de coïncidence et DSC. (English summary) **(80d:06006)**
Burdina, V. I. Isometric stereohedra of a manifold of revolution. (Russian) **(80e:22016)**
Bussemaker, F. C. (*with* Cvetković, Dragoš M.; Seidel, J. J.) Graphs related to exceptional root systems. **(80g:05049)**
Coxeter, Harold Scott MacDonald Polytopes in the Netherlands. **(80k:01042)**
Cvetković, Dragoš M. *See* **Bussemaker, F. C.; et al., (80g:05049)**
(Euclid) *See* **Fischler, Roger, (80j:01005)**
Fischler, Roger A remark on Euclid II, 11. (French summary) **(80j:01005)**
Flatto, Leopold Invariants of finite reflection groups. **(80j:14010)**
Hosoya, Masahiko A new group-theoretical derivation of the Bravais lattices. **(80g:82037)**
Hubbard, R. Colour symmetry in crystallographic space groups. **(80b:28063)**
Kopcik, V. A. *See* **Kuzukeev, Ž.-N. M., (80k:82064)**
Kuzukeev, Ž.-N. M. (*with* Kopcik, V. A.) Symmetry groups of colored polyhedra and colored simple forms. **(80k:82064)**
Lingenberg, Rolf Vollständige metrische Ebenen. **(80i:51017)**
Löwen, Rainer Classification of 4-dimensional symmetric planes. **(80i:51021)**
Navaza, J. (*with* Silva, A. M.) A geometrical approach to solving crystal structures. **(80b:82054)**
Oates-Williams, Sheila (*with* Street, Anne Penfold) The analysis of colour symmetry. **(80i:20021)**
Ohsumi, K. *See* **Sadanaga, R., (80b:82034)**
Qualsser, Erhard Spiegelungsgeometrische Darstellungen der desarguesschen Ebenen mit Fano-Axiom. (Russian and English summaries) **(80g:51007)**
Sadanaga, R. (*with* Ohsumi, K.) Basic theorems of vector symmetry in crystallography. **(80b:82034)**
Seidel, J. J. *See* **Bussemaker, F. C.; et al., (80g:05049)**
Silva, A. M. *See* **Navaza, J., (80b:82054)**
Street, Anne Penfold *See* **Oates-Williams, Sheila, (80i:20021)**

51F20 Congruence and orthogonality [See also 20H05.]

Geise, Gerhard Ein Kalkül für geometrische Aufgaben. **80b:51007**

Secondary classifications:

Lockwood, E. H. (*with* Macmillan, R. H.) ★Geometric symmetry. **(80c:51016)**
Macmillan, R. H. *See* **Lockwood, E. H., (80c:51016)**

51F25 Orthogonal and unitary groups [See also 20H05.]

Ferrarese, Giorgio (*with* Stazi, Luigi) On the structure of the rotations in a

three-dimensional hyperbolic space. (Italian. English summary) **80e:51011**
Stazi, Luigi *See* **Ferrarese, Giorgio, 80e:51011**

Secondary classifications:

Johnsen, Karsten Über orthogonale Zerlegungen metrischer G-Moduln. **(80k:15037)**

51F99 None of the above, but in this section

Kahn, Peter J. Counting types of rigid frameworks. **80m:51008**
Lester, J. A. Transformations of n-space which preserve a fixed square-distance. **80f:51004**
Quaisser, Erhard Zu metrischen affinen Ebenen unter endlichem Aspekt. (Russian and English summaries) **80k:51014**
Schaeffer, Helmut Eine Winkelmetrik zur Begründung euklidisch-metrischer Ebenen. (English summary) **80k:51006**

Secondary classifications:

Dinkines, Charles (*with* White, Albert) Some geometric remarks concerning strictly 2-convex spaces. **(80b:52003)**
White, Albert *See* **Dinkines, Charles, (80b:52003)**

51G05 Ordered geometries (ordered incidence structures, etc.)

Deák, J. A new characterization of the class of subspaces of a Euclidean space. **80k:51006**
Guggenheimer, H. The Jordan and Schoenflies theorems in axiomatic geometry. **80e:51008**
Noll, Walter (*with* Schäffer, Juan Jorge) Order-isomorphisms in affine spaces. **80j:51015**
Šaidenko, A. V. On the question of mappings of families of cones. (Russian) **80f:51005**
Schäffer, Juan Jorge *See* **Noll, Walter, 80j:51015**

Secondary classifications:

Calabrese, Philip The probability of the triangle inequality in probabilistic metric spaces. **(80g:60011)**

51Hxx Topological geometry

51H05 General theory

Secondary classifications:

Podran, V. E. Spherically univalent pipes in Euclidean space E^{n+1}. (Russian) **(80j:53005)**

51H10 Topological linear incidence structures

Betten, Dieter Komplexe Schiefparabel-Ebenen. **80m:51009**
Misfeld, Jürgen (*with* Sigmon, Kermit) Completion of topological incidence groups. **80b:51008**
Salzmann, Helmut Compact 8-dimensional projective planes with large collineation groups. **80f:51020**
Sigmon, Kermit *See* **Misfeld, Jürgen, 80b:51008**

Secondary classifications:

Lorimer, J. W. Connectedness in topological Hjelmslev planes. **(80f:51009)**

51H15 Topological nonlinear incidence structures

51H20 Topological geometries on manifolds [See also 57–XX.]

51H25 Geometries with differentiable structure [See also 53Cxx, 53C70.]

Löwen, Rainer Classification of 4-dimensional symmetric planes. **80f:51021**

51H30 Geometries with algebraic manifold structure [See also 14–XX.]

51H99 None of the above, but in this section

51Jxx Incidence groups

51J05 General theory

Secondary classifications:

Abbasov, N. T. Automorphisms and anti-automorphisms of biquasisimple algebras. (Russian. Azerbaijani summary) **(80j:16006)**

51J10 Projective incidence groups

Secondary classifications:

Havel, Václav (*with* Studnička, Ivan) Ternärringe ohne Planaritätsbedingung. (Czech, Russian and English summaries) **(80d:20066)**
de Meur, G. Espaces de Fischer hermitiens. **(80j:20003)**
Studnička, Ivan *See* **Havel, Václav, (80d:20066)**

51J15 Kinematic spaces

Secondary classifications:

Frank, Herbert ★Geochronometrie (ohne Instabilitäten). IV. **(80h:83036)**
Hotje, Herbert Die Algebren einbettbarer Berührstrukturen. **(80b:51003)**

51J20 Representation by near-fields and near-algebras [See also 12K05, 16A76.]

Kallaher, Michael J. (*with* Ostrom, T. G.) Bol quasifields and generalized André systems. **80h:51015**
Ostrom, T. G. *See* **Kallaher, Michael J., 80h:51015**

51J99 None of the above, but in this section

51Kxx Distance geometry

51K05 General theory

Flachsmeyer, Jürgen On the Busemann metrization of the hyperspace. **80f:51022**
Grochulski, J. (*with* Konik, Tadeusz; Tkacz, M.) On some relations of tangency of arcs in metric spaces. **80f:51023**
Jacquot, Bernard Caractérisation des compacts metriques contenant un arc. **80j:51016**
Konik, Tadeusz *See* **Grochulski, J.; et al., 80f:51023**
Kuz'minyh, A. V. Mappings preserving the distance 1. (Russian) **80h:51016**
Tkacz, M. *See* **Grochulski, J.; et al., 80f:51023**

Secondary classifications:

Belousov, V. D. ★Конфигурации в алгебраических сетях. (Russian) [Configurations in algebraic nets] **(80k:20074)**
Gleason, Andrew M. A curvature formula. **(80d:53003)**
Gorelik, G. E. The dimension of space based on the metric. (Russian) **(80d:83084)**
Perry, E. L. Distance between partitions on a finite set. **(80c:05012)**
Pogorelov, A. V. ★Hilbert's fourth problem. **(80j:53066)**
Rosenfeld, Moshe Distance geometry and graphs. **(80j:05060)**
(Silverman, Richard A.) *See* **Pogorelov, A. V., (80j:53066)**

51K10 Synthetic differential geometry

Secondary classifications:

Busemann, H. (*with* Phadke, B. B.) Minkowskian geometry, convexity conditions and the parallel axiom. **(80d:53043)**
Klotz, A. H. Geometry at infinity. **(80d:83093)**
Konik, Tadeusz On the symmetry and transitivity of tangency relation in a metric space. (Polish summary) **(80d:53044)**
Phadke, B. B. *See* **Busemann, H., (80d:53043)**

51K99 None of the above, but in this section

Schröder, Eberhard M. Eine Ergänzung zum Satz von Beckman and Quarles. (English summary) **80h:51017**

Secondary classifications:

Höhle, Ulrich Probabilistische Metriken auf der Menge der nicht negativen Verteilungsfunktionen. **(80k:54057)**

51Lxx Geometric order structures [See also 53C75.]

51L05 Geometry of orders of nondifferentiable curves

51L10 Directly differentiable curves

Secondary classifications:

Bisztriczky, Tibor On the lines of a surface of order three. **(80k:53105)**
(Haupt, Otto) *See* **Künneth, Hermann, (80f:53034)**
Künneth, Hermann Über Kontinua im P_n vom schwachen Punktordnungswert $n+1$. **(80f:53034)**
(Schenkel, Antonie) *See* **Künneth, Hermann, (80f:53034)**

51L15 n-vertex theorems via direct methods

51L20 Geometry of orders of surfaces

Secondary classifications:

Bisztriczky, Tibor Surfaces of order three with a peak. I. **(80e:53046)**
Surfaces of order three with a peak. II. **(80h:53047)**
Uniplanar surfaces of order three. **(80m:53053)**
Haupt, Otto Differenzierbare ordnungshomogene Bogen im $\mathbb{R}^n$. **(80b:53048)**

51L99 None of the above, but in this section

51Mxx Real and complex geometry

51M05 Euclidean geometries

Aczél, J. E. Picardus ab omni naevo liberatus (on the axiomatics of vector addition). **80j:51017**

Bottema, O. Commentary on a result of Mannheim. (Dutch) **80m:51010**

van de Craats, J. Euclidean transformation geometry. (Dutch) **80h:51018**

Farrahi, Bijan A characterization of isometries of rational Euclidean spaces. **80d:51014**

Hohenberger, H. Eine Asymptotenkonstruktion der Hyperbel. **80d:51015**

Kocko, Eryk Three-dimensional pipe joining. **80h:51019**

Kuz'minyh, A. V. Characterization of isometric and similar mappings. (Russian) **80f:51006**

Longuet-Higgins, M. S. (*with* Parry, C. F.) Inverse properties of the plane n-line. II. An infinite six-fold chain of circle theorems. **80k:51007**

Parry, C. F. *See* **Longuet-Higgins, M. S., 80k:51007**

Satyanarayana, Kesiraju ★Dihedral angles and in- and ex-elements of n-space simplexes. **80i:51024**

Ts'ao, Liang Chi A collinear theorem for quadrilaterals. **80b:51011**

Tsuda, Takeo An elementary proof of Pascal's theorem. (Japanese) **80h:51020**

Wunderlich, Walter Über gefährliche Annahmen beim Clausenschen und Lambertschen Achtpunktproblem. **80m:51011**

Secondary classifications:

Maracchia, S. The postulate behind the scenes. (Italian) **(80a:01003)**

51M10 Hyperbolic and elliptic geometries

Coxeter, Harold Scott MacDonald The amplitude of a Petrie polygon. **80b:51009**

Jessen, Børge Einige Bemerkungen zur Algebra der Polyeder in nicht-euklidischen Räumen. **80b:51010**

Nečaenko, T. S. Symmetries of the space ${}^2S_3$. (Russian) **80j:51018**

Pasquali Coluzzi, Dario The axial symmetries of the hyperbolic plane. (Italian. English summary) **80a:51009**

Vrînceanu, Gheorghe Models of non-Euclidean hyperbolic geometry. (Romanian) **80f:51007**

Secondary classifications:

Beardon, A. F. (*with* Pommerenke, Ch.) The Poincaré metric of plane domains. **(80a:30020)**

Bigalke, Hans-G. Das Pentagramma mirificum. **(80d:01013)**

Ferrarese, Giorgio (*with* Stazi, Luigi) On the structure of the rotations in a three-dimensional hyperbolic space. (Italian. English summary) **(80e:51011)**

Kuz'minyh, A. V. Mappings preserving the distance 1. (Russian) **(80h:51016)**

Pommerenke, Ch. *See* **Beardon, A. F., (80a:30020)**

Stazi, Luigi *See* **Ferrarese, Giorgio, (80e:51011)**

Strommer, Gyula The construction theory in the Bolyai geometry. (Hungarian) **(80d:51001)**

51M15 Geometric constructions

Brejcha, Josef R-lines of a plane quadrangle. (Czech. English and Russian summaries) **80a:51010**

Conway, John H. (*with* Croft, H. T.; Erdős, Paul; Guy, M. J. T.) On the distribution of values of angles determined by coplanar points. **80h:51021**

Croft, H. T. *See* **Conway, John H.; et al., 80h:51021**

Erdős, Paul *See* **Conway, John H.; et al., 80h:51021**

Guy, M. J. T. *See* **Conway, John H.; et al., 80h:51021**

Hecquet, Jean-Charles À propos de la sphère d'Euler. (English summary) **80e:51012**

Henkin, Leon (*with* Leonard, William A.) A Euclidean construction? **80d:51016**

Leonard, William A. *See* **Henkin, Leon, 80d:51016**

Qundlng, D. A. Last words on adventitious angles. **80a:51011**

Rigby, J. F. Adventitious quadrangles: a geometrical approach. **80c:51015**

Sakashita, Hideo Adventitious angles. (Japanese. English summary) **80a:51012**

Seidel, J. J. The pentagon. **80f:51008**

Ungethüm, E. Ponceletsche Dreiecksscharen. **80k:51008**

Wunderlich, Walter Über die Wattsche Geradführung. **80a:51013**
Zur Geometrie der Vogeleier. **80g:51014**

Secondary classifications:

Bondi, Hermann The cubes. **(80e:51001)**

Hohenberger, H. Eine Asymptotenkonstruktion der Hyperbel. **(80d:51015)**

Malimov, M. M. ★*Y*развнивание геодезических сетей. (Russian) [Smoothing of geodesic nets] **(80k:86006)**

Starbird, Michael Flexible regular neighborhoods for complexes in E^3. **(80k:57046)**

51M20 Polyhedra and polytopes; regular figures, division of spaces [See also 51F15.]

Alexanderson, Gerald L. (*with* Seydel, Kenneth) Kürschak's tile. **80b:51012**

(*with* Wetzel, John E.) Simple partitions of space. **80e:51013**

Bilinski, Stanko Funktionale von primitiven Polygonen Kleinscher Ebenen. **80i:51025**

Lockwood, E. H. (*with* Macmillan, R. H.) ★Geometric symmetry. **80c:51016**

Macmillan, R. H. *See* **Lockwood, E. H., 80c:51016**

Seydel, Kenneth *See* **Alexanderson, Gerald L., 80b:51012**

Simmons, Gustavus J. (*with* Wetzel, John E.) A two-coloring inequality for Euclidean two-arrangements. **80k:51009**

Wetzel, John E. On the division of the plane by lines. **80e:51014**

See also **Alexanderson, Gerald L., 80e:51013** *and* **Simmons, Gustavus J., 80k:51009**

Secondary classifications:

Bigalke, Hans-G. Das Pentagramma mirificum. **(80d:01013)**

Broline, Duane M. Frieze patterns as matrix multiplication tables. **(80k:05022)**

Coxeter, Harold Scott MacDonald Polytopes in the Netherlands. **(80k:01042)**

Field, J. V. Kepler's star polyhedra. **(80j:01009)**

Gilles, Jack, Jr. Infinite-level replicating dissections of plane figures. **(80g:51013a)**
Construction of replicating superfigures. **(80g:51013b)**
Superfigures replicating with polar symmetry. **(80g:51013c)**

(Kepler, Johannes) *See* **Field, J. V., (80j:01009)**

Lagrange, Jean Sur le dérivé du cuboïde eulérien. **(80k:10022)**

Purdy, George B. Triangles in arrangements of lines. **(80k:05017)**

Strommer, Thomas O. The number of lines determined by a polygon. **(80k:05018)**

Wilson, Steve The smallest nontoroidal chiral maps. **(80b:57007)**

51M25 Length, area and volume [See also 26B15.]

Secondary classifications:

Cohen, Jacques (*with* Hickey, Timothy) Two algorithms for determining volumes of convex polyhedra. **(80g:52006)**

Hickey, Timothy *See* **Cohen, Jacques, (80g:52006)**

Hotje, Herbert Zur Definition des Flächeninhalts in affinen Ebenen. **(80g:51005)**

51M30 Line geometries and their generalizations

Weiss, Gunter Zur euklidischen Liniengeometrie. I. **80m:51012**

Secondary classifications:

Teschke, Lothar (*with* Zimmermann, Karel) Extremale Algebren und verallgemeinerte Konvexitätsräume. (English and Czech summaries) **(80k:52003)**

Zimmermann, Karel *See* **Teschke, Lothar, (80k:52003)**

51M35 Synthetic treatment of fundamental manifolds in projective geometries (Grassmannians, Veronesians and their generalizations) [See also 14M15.]

Secondary classifications:

Contou-Carrère, Carlos E. Immeuble de Tits d'un groupe réductif et construction d'une famille de modèles birationnels lisses pour les adhérences des cellules de Schubert généralisées. (English summary) **(80c:14032)**

51M99 None of the above, but in this section

Kerr, Jeanne W. (*with* Wetzel, John E.) Platonic divisions of space. **80b:51013**

Wetzel, John E. *See* **Kerr, Jeanne W., 80b:51013**

Secondary classifications:

Wetzel, John E. Dissections of a simply-connected plane domain. **(80d:54042)**

51Nxx Analytic and descriptive geometry

51N05 Descriptive geometry

Bulubeşa, M. (*with* Noveanu, Liliana) Studies on the representation of helicoidal surfaces in the Steiner projection. (Romanian. French summary) **80a:51014**

Kirchner, K. Über die konstruktive Behandlung von speziellen automorphen affinen Abbildungen von Ebenen des $\mathbf{R}^4$. **80k:51010**

Langlet, G. A. A new fast direct solution to the problem of the sphere tangent to four spheres. **80i:51026**

MacDonnell, Joseph A family of unifacial surfaces. **80k:51011**

Mögling, W. Zur darstellenden Geometrie des $\mathbf{R}^3$ als einer speziellen Hyperebene des $\mathbf{R}^4$. **80k:51012**

Noveanu, Liliana *See* **Bulubeşa, M., 80a:51014**

Rabl, Karl Über die Koinzidenzgebilde von linearen Zweibilderverfahren für den n-dimensionalen Raum. I. **80k:51013**

Rehbock, Fritz ★Geometrische Perspektive. **80g:51015**

Schröder, Eberhard M. ★Darstellende Geometrie. **80k:51014**

Wunderlich, Walter Kurzer Beweis eines Satzes aus der Kinematik ähnlich-veränderlicher Felder. **80c:51017**
Darstellend-geometrischer Beweis eines merkwürdigen Schliessungssatzes. **80d:51017**

Secondary classifications:

Connelly, Robert The rigidity of polyhedral surfaces. **(80k:53089)**

Hohenberger, H. Eine Asymptotenkonstruktion der Hyperbel. **(80d:51015)**

Janson, Svante Fast tunnels. (Swedish. English summary) **(80m:49034)**

Miki, Tetsuo Utilisation of conic sections for the representation of sections of surfaces. (Japanese. English summary) **(80k:65005)**

Wunderlich, Walter Sur une déformation remarquable du système des génératrices d'un cône du second degré et un problème de géodésie. (Romanian summary) **(80k:53015)**

51N10 Affine analytic geometry

51N15 Projective analytic geometry

Tschupik, Josef Peter Systeme simultaner Projektionen in projektiven Räumen. **80d:51018**
Whiteley, Walter Projective geometry and rigid buildings. **80e:51018**

Secondary classifications:

Bartolone, Claudio (*with* Di Franco, Fabio) A remark on the projectivities of the projective line over a commutative ring. **(80m:51001)**
Di Franco, Fabio *See* **Bartolone, Claudio, (80m:51001)**
Kucharzewski, Mieczysław Orientability of n-dimensional projective geometry. **(80h:51023)**

51N20 Euclidean analytic geometry

Abi-Khuzam, Faruk F. Distance theorems in geometry. **80f:51009**
Connelly, Robert The rigidity of suspensions. **80j:51019**
Cundy, H. Martyn The seven-circles theorem. **80c:51019**
Jędryka, Halina J. Some methodological ideas concerning chords, diameters and polar conics. (Polish) **80a:51015**
Klamkin, Murray S. Triangle inequalities from the triangle inequality. **80m:51013**
Maor, Eli Line equations of curves: duality in analytic geometry. **80f:51010**
Reuschel, Arnulf Vielecke, die einen Umkreis und einen Inkreis besitzen. **80g:51016**

Secondary classifications:

Hecquet, Jean-Charles À propos de la sphère d'Euler. (English summary) **(80e:51012)**
Ignatenko, V. F. Conditions for the invariance of a cubic surface relative to the symmetry group of a regular tetrahedron. (Russian) **(80k:14045)**
Malinov, M. M. ★Уравнивание геодезических сетей. (Russian) [Smoothing of geodesic nets] **(80k:86006)**
Medek, Václav (*with* Zámožík, J.) Über den Umriss der konvexen Flächen. **(80h:52004)**
Strocker, R. J. Application of non-linear programming to plane geometry. **(80h:52023)**
Zámožík, J. *See* **Medek, Václav, (80h:52004)**

51N25 Analytic geometry with other transformation groups

Palman, Dominik Über die Kugelschnitte der Torusfläche des isotropen Raumes I_3. **80h:51022**
Tölke, Jürgen Die isotropen Gegenstücke der Darboux-Bewegungen. **80i:51027**
Isotrope Kegelschnittsbewegungen. (English summary) **80i:51028**

Secondary classifications:

Sachs, Hans Lineare Geradenkomplexe im Flaggenraum $I_3^{(2)}$. **(80k:53021)**

51N30 Geometry of classical groups [See also 20Gxx, 14Lxx.]

Crilly, Tony Finite vector spaces from rotating triangles. **80e:51015**
Kucharzewski, Mieczysław Orientability of n-dimensional projective geometry. **80h:51023**
Pavković, B. Eine kennzeichnende Eigenschaft der Zykel der Galileischen Ebene. **80m:51014**

51N35 Questions of classical algebraic geometry [See also 14Nxx.]

Griffiths, Phillip A. (*with* Harris, Joseph) On Cayley's explicit solution to Poncelet's porism. **80g:51017**
Guiel', N. P. (*with* Tihomirov, A. S.) Algebraic two-dimensional systems of a plane in P_4 and their application in the theory of mappings. (Russian) **80h:51024**
Harris, Joseph *See* **Griffiths, Phillip A., 80g:51017**
Krames, Josef Über die konstant gedrallte windschiefe Fläche dritten Grades. **80k:51014**
Tihomirov, A. S. *See* **Guiel', N. P., 80h:51024**

Secondary classifications:

Bernardi, Marco (*with* Liburdi, Arrigo) Harnack's problems concerning the real algebraic curves of the real ruled cubic normal of the space S_4. I. (Italian. English summary) **(80b:14016)**
Hunt, K. H. ★Kinematic geometry of mechanisms. **(80g:70002)**
Liburdi, Arrigo *See* **Bernardi, Marco, (80b:14016)**

51N99 None of the above, but in this section

Gutiérrez Novoa, Lino Non-Euclidean real numbers. (Italian summary) **80j:51020**
Stynes, Martin On faster convergence of the bisection method for certain triangles. **80c:51020**

Secondary classifications:

Hartung, R. W. Pauli principle in Euclidean geometry. **(80g:81008)**
Imaeda, K. Quaternionic formulation of tachyons, superluminal transformations and a complex space-time. (Italian and Russian summaries) **(80d:83004)**

52–XX CONVEX SETS AND RELATED GEOMETRIC TOPICS

52–01 Elementary exposition, textbooks

Boltjanskiĭ, V. G. (*with* Soltan, P. S.) ★Комбинаторная геометрия различных классов выпуклых множеств. (Russian) [Combinatorial geometry of various classes of convex sets] **80g:52001**
Jantosciak, James *See* **Prenowitz, Walter, 80c:52001**
Kelly, Paul J. (*with* Weiss, Max L.) ★Geometry and convexity. **80h:52001**
Prenowitz, Walter (*with* Jantosciak, James) ★Join geometries. **80c:52001**
Soltan, P. S. *See* **Boltjanskiĭ, V. G., 80g:52001**
Weiss, Max L. *See* **Kelly, Paul J., 80h:52001**

Secondary classifications:

(Dorn, Gernot) *See* **Griffiths, H. B., (80h:57001)**
Griffiths, H. B. ★Oberflächen. **(80h:57001)**

52–02 Advanced exposition (research surveys, monographs, etc.)

Harazišvili, A. B. ★Избранные вопросы геометрии евклидовых пространств. (Russian) [Selected questions in the geometry of Euclidean spaces] **80d:52001**

52–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Broman, Arne Holditch's theorem is somewhat deeper than Holditch thought in 1858. (Swedish. English summary) **(80k:01031)**
Coxeter, Harold Scott MacDonald Polytopes in the Netherlands. **(80k:01042)**
Fellmann, E. A. Über eine Bemerkung von G. W. Leibniz zu einem Theorem in Newtons *Principia Mathematica*. (English summary) **(80h:01005)**
(Leibniz, Gottfried Wilhelm) *See* **Fellmann, E. A., (80h:01005)**
(Newton, Isaac) *See* **Fellmann, E. A., (80h:01005)**

52–04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

Bykat, A. Convex hull of a finite set of points in two dimensions. **(80b:68041)**
Cohen, Jacques (*with* Hickey, Timothy) Two algorithms for determining volumes of convex polyhedra. **(80g:52006)**
Hickey, Timothy *See* **Cohen, Jacques, (80g:52006)**
Lee, D. T. *See* **Yang, Chung Chun, (80c:68065)**
Muller, D. E. (*with* Preparata, Franco P.) Finding the intersection of two convex polyhedra. **(80b:68043)**
Preparata, Franco P. *See* **Muller, D. E., (80b:68043)**
Yang, Chung Chun (*with* Lee, D. T.) A note on the all nearest-neighbor problem for convex polygons. **(80c:68065)**

52–06 Proceedings, conferences, etc.

52A01 Axiomatic and generalized convexity

Cantwell, John Geometric convexity. II. Topology. **80i:52001a**
(*with* Kay, David C.) Geometric convexity. III. Embedding. **80i:52001b**
Dessard, André On the construction of the linear hull of a set in a convexity space using only the extension operation. **80b:52001**
Guljanickiĭ, L. F. Some functional concepts in discrete spaces. (Russian. English summary) **80h:52002**
Kay, David C. *See* **Cantwell, John, 80i:52001b**
Kolero, M. V. Preconvex sets in linear normed spaces. (Russian. English summary) **80d:52002**
Obiedu, E. U. Non-Archimedean convexity spaces. **80b:52002**
Soltan, P. S. *See* **Soltan, V. P., 80j:52001**
Soltan, V. P. (*with* Soltan, P. S.) d-convex functions. (Russian) **80j:52001**
Teschke, Lothar (*with* Zimmermann, Karel) Extremale Algebren und verallgemeinerte Konvexitätsräume. (English and Czech summaries) **80h:52003**
Zimmermann, Karel A generalization of convex functions. (Czech summary) **80g:52002**
See also **Teschke, Lothar, 80h:52003**

Secondary classifications:

Dessard, André Polytopes in nonnecessarily complete convexity spaces. **(80e:52005)**
Mankiewicz, Piotr Fat equicontinuous groups of homeomorphisms of linear topological spaces and their application to the problem of isometries in linear metric spaces. **(80g:46004)**

52A05 Convex sets without dimension restrictions

Bair, Jacques Sur la structure extrémale de la somme de deux convexes. **80c:52002**
Breckner, Wolfgang W. Stetigkeitsaussagen für eine Klasse verallgemeinerter konvexer Funktionen in topologischen linearen Räumen. **80m:52001**
Diminnie, Charles (*with* White, Albert) Some geometric remarks concerning strictly 2-convex spaces. **80b:52003**
Grinblat, L. Š. Circles in the unit sphere of a Hilbert space. **80d:52003**
Gudder, Stanley P. Erratum: "Convexity and mixtures" (Siam Rev. **19** (1977), no. 2, 221–240). **80b:52004**
Soltan, V. P. d-convex sets in finite metric spaces. (Russian) **80j:52013**
White, Albert *See* **Diminnie, Charles, 80b:52003**

Secondary classifications:

Bair, Jacques (*with* Gwinner, Joachim) Sur la séparation vraie de cônes convexes. (English summary) **(80a:46011)**
Beer, Gerald Recession cones of nonconvex sets and increasing functions. **(80b:52019)**

Gwinner, Joachim *See* **Bair, Jacques, (80a:46011)**
Kotkowski, Bogdan (*with* Magdziarz, Janusz; Waszak, Aleksander) Some remarks on Minkowski functional. **(80m:46002)**
Magdziarz, Janusz *See* **Kotkowski, Bogdan; et al., (80m:46002)**
Sudakov, V. N. Geometric problems in the theory of infinite-dimensional probability distributions. **(80e:60052)**
Valdivia Ureña, Manuel Some notes on convex sets. **(80j:46024)**
Waszak, Aleksander *See* **Kotkowski, Bogdan; et al., (80m:46002)**
Zajíček, Luděk On the differentiation of convex functions in finite and infinite dimensional spaces. **(80h:46063)**
Trudy Mat. Inst. Steklov. *See* **Sudakov, V. N., (80e:60052)**

52A07 Convex sets in topological vector spaces [See also 46A55.]

Soltan, V. P. Bodies of constant width in finite-dimensional normed spaces. (Russian) **80d:52004**

52A10 Convex sets in 2 dimensions

Croft, H. T. Cushions, cigars and diamonds: an area-perimeter problem for symmetric ovals. **80e:52001**
Erdős, Paul Some more problems on elementary geometry. **80b:52005**
Kramer, Horst A characterization of boundaries of smooth strictly convex plane sets. **80e:52002**
Scott, Paul R. Two inequalities for convex sets in the plane. **80d:52005**

Secondary classifications:

Button, Lilian (*with* Wilker, John B.) Cutting exponents for polyhedral approximations to convex bodies. **(80h:52005)**
Hammer, Joseph Lattice points and area-diameter relation. **(80d:10044)**
Pomerance, Carl The prime number graph. **(80d:10013)**
Wilker, John B. *See* **Button, Lilian, (80h:52005)**

52A15 Convex sets in 3 dimensions

Medek, Václav (*with* Zámožík, J.) Über den Umriss der konvexen Flächen. **80h:52004**
Tripiciano, Giulia Some properties of convex curves in $\mathbf{R}^2$; application to the calculation of approximations of volumes of convex sets. (Italian) **80d:52006**
Zámožík, J. *See* **Medek, Václav, 80h:52004**

Secondary classifications:

Brostow, Witold (*with* Dussault, Jean-Pierre) Construction of Voronoi polyhedra. **(80b:10043)**
Dussault, Jean-Pierre *See* **Brostow, Witold, (80b:10043)**
Erdős, Paul Some more problems on elementary geometry. **(80b:52005)**
Medjanik, A. I. A theorem of C. Miranda. (Russian) **(80a:53004)**

52A20 Convex sets in n dimensions

Baldon, John D. A counterexample to a "theorem" on L_n sets. **80d:52007**
Blising, Dieter Über konvexe Hyperflächen. (Russian, English and French summaries) **80d:52008**
Berwein, Jonathan M. (*with* O'Brien, Richard C.) Cancellation characterizes convexity. **80b:52006**
Brondsted, Arne More about intersections of translates of convex sets. **80f:52001**
Bronitein, E. M. Extremal H-convex bodies. (Russian) **80f:52002**
Burton, G. R. (*with* Mani, P.) A characterisation of the ellipsoid in terms of concurrent sections. **80c:52003**
On the nearest-point map of a convex body. **80k:52001**
Congruent sections of a convex body. **80f:52002**
Button, Lilian (*with* Wilker, John B.) Cutting exponents for polyhedral approximations to convex bodies. **80h:52005**
Clarke, R. J. Sequences of polygons. **80c:52004**
Fedotov, V. P. The sum of pth surface functions. (Russian) **80a:52001**
Isolated edges of a convex compact set. (Russian) **80d:52009**
A counterexample to Firey's conjecture. (Russian) **80f:52003**
Fiedler, Miroslav Minimal sets of vectors which generate $\mathbf{R}^n$ with excess k. **80e:52003**
Goodey, P. R. (*with* Woodcock, M. M.) A characterization of sets of constant width. **80b:52007**
Gruber, Peter M. Isometries of the space of convex bodies of E^d. **80c:52005**
Haraziśvili, A. B. Affine diameters of convex bodies. (Russian. Georgian and English summaries) **80a:52002**
Harborth, Heiko Konvexe Fünfecke in ebenen Punktmengen. **80a:52003**
Heil, Erhard Existenz eines 6-Normalenpunktes in einem konvexen Körper. **80j:52002a**
Korrektur zu: "Existenz eines 6-Normalenpunktes in einem konvexen Körper" [Arch. Math. (Basel) **32** (1979), no. 4, 412–416; MR 80j:52002a]. **80j:52002b**
Khan, M. Ali Some remarks on sets unbounded nonconvexities. **80l:52004**
Klamkin, Murray S. (*with* Tsintsifas, George A.) The circumradius-inradius inequality for a simplex. **80d:52010**
Lawrence, Jim Cutting the d-cube. **80c:52006**
Mani, P. *See* **Burton, G. R., 80c:52003**
Marangozova, P. C. A theorem for the separability of sets. (Bulgarian. Russian and English summaries) **80h:52006**
Matheron, G. The infinitesimal erosions. **80b:52008**
McMullen, P. Lattice invariant valuations on rational polytopes. **80d:52011**
Nanclares, Jorge H. (*with* Toranzos, Fausto A.) Inscribing simplices in convex bodies. **80a:52004**
Nanda, Sribatsa (*with* Nanda, Sudarsan) On stationary points and the complementarity problem. **80j:52003**
Nanda, Sudarsan *See* **Nanda, Sribatsa, 80j:52003**
Netrebin, A. G. Properties of systems of n-dimensional convex sets in finite-dimensional linear spaces. (Russian) **80j:52004**
O'Brien, Richard C. *See* **Borwein, Jonathan M., 80b:52006**
Pfarr, Ernst-Adam Zum Beweis des Carathéodory-Theorems für Kegel. **80c:52007**
Salinetti, Gabriella (*with* Wets, Roger J.-B.) On the convergence of sequences of convex sets in finite dimensions. **80h:52007**
Šaraburova, L. G. (*with* Šalkin, Ju. A.) Intersections of convex cones. (Russian) **80b:52009**
Šalkin, Ju. A. *See* **Šaraburova, L. G., 80b:52009**
Schneider, Rolf Curvature measures of convex bodies. **80d:52012**
Thomas, R. H. K. Pairs of convex bodies. **80m:52002**
Toranzos, Fausto A. *See* **Nanclares, Jorge H., 80a:52004**
Tsintsifas, George A. *See* **Klamkin, Murray S., 80d:52010**
Weil, Wolfgang Centrally symmetric convex bodies and distributions. II. **80g:52003**
Wets, Roger J.-B. *See* **Salinetti, Gabriella, 80h:52007**
Wilker, John B. *See* **Button, Lilian, 80h:52005**
Wills, Jörg M. Gitterzahlen und innere Volumina. **80c:52010**
Woodcock, M. M. *See* **Goodey, P. R., 80b:52007**

Secondary classifications:

Barker, George Phillip Perfect cones. **(80a:15020)**
Diskant, V. I. On the question of the order of the stability function in Minkowski's problem. (Russian) **(80k:53090)**
Eckhardt, Ulrich Representation of convex sets by linear inequalities. **(80h:90095)**
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52A40 Inequalities and extremum problems

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52A50 Hilbert geometry [See also 51Kxx.]

52A55 Spherical and hyperbolic convexity

52A99 Miscellaneous topics

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Ranga Rao, P. Metric spaces with distances in a lattice ordered group. **80a:52017**
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Danaraj, Gopal (*with* Klee, Victor) Which spheres are shellable? **(80b:57013a)**
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53–XX DIFFERENTIAL GEOMETRY {For differential topology, see 57Rxx. For foundational questions of differentiable manifolds, see 58Axx.}

53–01 Elementary exposition, textbooks

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Kolata, Gina Bari Isadore Singer and differential geometry. **(80k:01056)**
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Biography:
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Correspondence:
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53–04 Explicit machine computation and programs (not the theory of computation or programming)

Bonitz, Peter Ein Beitrag zur Theorie des Entwurfs doppelt gekrümmter Flächen unter differentialgeometrischen und rechentechnischen Aspekten. **80e:53002**
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(Gamkrelidze, R. V.) *See* **Problems in geometry, 80d:53002**
(Mas'kin, N. M.) *See* **Current problems of geometry and its applications, 80k:53001**
(Verner, A. L.) *See* **Studies in the geometry of imbedded manifolds and projective geometry, 80m:53001**
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53Axx Classical differential geometry

53A04 Curves in Euclidean space

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53A20 Projective differential geometry

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53A30 Conformal differential geometry

Jankovský, Zdeněk Zur Approximation der Bahnkurven der $\mathfrak{N}$-Bewegung. (Czech and Russian summaries) **80h:53012**

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Furlan, P. *See* **Budini, Paolo; et al., (80k:81123)**

d'Inverno, R. A. (*with* Stachel, John J.) Conformal two-structure as the gravitational degrees of freedom in general relativity. **(80b:83018)**

Jadczyk, A. Z. A note on conformal field equations. **(80k:83023)**

Mishra, R. S. Solutions of equations of Einstein's unified field theory. **(80a:83020)**

Rączka, Ryszard *See* **Budini, Paolo; et al., (80k:81123)**

Stachel, John J. *See* **d'Inverno, R. A., (80b:83018)**

53A35 Non-Euclidean differential geometry

Efremovič, V. A. *See* **Vaĭnshteĭn, A. G.; et al., 80a:53008**

Gorelik, E. M. *See* **Vaĭnshteĭn, A. G.; et al., 80a:53008**

Jørgensen, Troels Closed geodesics on Riemann surfaces. **80b:53006**

Stachel, Hellmuth Strahlflächen im quasielliptischen Raum. **80k:53020**

Vaĭnshteĭn, A. G. (*with* Gorelik, E. M.; Efremovič, V. A.) Layering the Lobačevskiĭ plane. (Russian) **80a:53008**

Vernikov, M. B. Higher order Ricci tensors of a surface in an affine-symplectic space. (Russian) **80i:53007**

Secondary classifications:

Ferrarese, Giorgio (*with* Stazi, Luigi) On the structure of the rotations in a three-dimensional hyperbolic space. (Italian. English summary) **(80e:51011)**

Kačurina, N. I. Conformally Euclidean hypersurfaces of a conformally Euclidean space. (Russian) **(80a:53055)**

Masal'cev, L. A. Instability of minimal cones in Lobačevskiĭ space. (Russian) **(80a:53070)**

Rumjančeva, E. N. A statistical model of Fridman's spherical universe. (Russian) **(80a:83023)**

Sasaki, R. Soliton equations and pseudospherical surfaces. **(80i:35168)**

Seichter, Ladislav A pair of corresponding line congruences of the space Sp_3. (Czech. English and Russian summaries) **(80c:53006)**

Stazi, Luigi *See* **Ferrarese, Giorgio, (80e:51011)**

53A40 Other special differential geometries

Careva, B. On mutual isogonal grids with a common bisector grid in Weyl two-dimensional space. (Russian) **80h:53013**

Sachs, Hans Lineare Geradenkomplexe im Flaggenraum $I_3^{(2)}$. **80k:53021**

Strubecker, Karl Theorie der flächentreuen Abbildungen der Ebene. **80e:53010**

Wunderlich, Walter Böschungsloxodromen und ebene Loxodromen im isotropen Raum. **80k:53022**

Secondary classifications:

Barbosa, João Lucas Marquès (*with* do Carmo, Manfredo P.) A proof of a general isoperimetric inequality for surfaces. **(80f:53043)**

von Borzeszkowski, H.-H. (*with* Treder, Hans-Jürgen; Yourgrau, W.) On singularities in electrodynamics and gravitational theory. **(80c:83008)**

do Carmo, Manfredo P. *See* **Barbosa, João Lucas Marquès, (80f:53043)**

Hostler, Levere Coulomb-like quantization of the electromagnetic field on spacelike hyperboloids. **(80a:81121)**

Treder, Hans-Jürgen *See* **von Borzeszkowski, H.-H.; et al., (80c:83008)**

Yourgrau, W. *See* **von Borzeszkowski, H.-H.; et al., (80c:83008)**

53A45 Vector and tensor analysis

Altman, Wolf *See* **de Oliveira, Antonio Marmo, 80a:53009**

Anderson, I. M. On the structure of divergence-free tensors. **80m:53014**

Germanov, O. S. (*with* Pisareva, N. M.; Jakovlev, E. I.) The first integral of geodesic lines and symmetry groups. (Russian) **80c:53008**

Jakovlev, E. I. *See* **Germanov, O. S.; et al., 80c:53008**

Jaszczak, Marian On harmonic and Killing symmetric tensors in V_n. **80g:53007**

Jotov, Ognjan On the group properties of some contractions. **80h:53014**

Norlega, Ricardo J. Concomitant connections of geometric objects. (Spanish. English summary) **80f:53012**

de Oliveira, Antonio Marmo (*with* Altman, Wolf) Coordinate transformations of physical components of tensors. **80a:53009**

Pisareva, N. M. *See* **Germanov, O. S.; et al., 80c:53008**

Sato, Yoshiharu Calculations on the mixed crossed extensor. **80b:53007**

Vulpe, N. I. The number of linearly independent compacta of a system of differential equations. (Russian) **80k:53023**

Secondary classifications:

Buchdahl, H. A. On a vector space of *C*-tensors. **(80c:53013)**

Ermolaev, E. A. The Lagrangian formalism for classical quaternionic fields. (Russian. English summary) **(80k:81221)**

Green, A. E. (*with* Naghdi, P. M.) A note on invariance under superposed rigid body motions. **(80f:73007)**

Grensing, G. Symmetric and traceless tensors on Minkowski space. **(80j:83001)**

Janković, Z. A new approach to spinor theory. **(80a:81131)**

Jerkovsky, W. The transformation operator approach to multi-subsystem dynamics. III. Applications to systems of rigid bodies. **(80a:70007)**

Naghdi, P. M. *See* **Green, A. E., (80f:73007)**

Treder, Hans-Jürgen Zur Struktur der allgemein-relativistischen Gravitationsgleichungen. **(80c:83007)**

53A50 Spinor analysis

Jhangiani, V. Geometric significance of the spinor Lie derivative. I. **80a:53010a**

Geometric significance of the spinor Lie derivative. II. **80a:53010b**

Secondary classifications:

Evangelidis, E. A. Plane of polarization rotation induced by a non-Minkowskian spacetime. **(80c:85004)**

53A55 Differential invariants (local theory), geometric objects

Green, Mark L. The moving frame, differential invariants and rigidity theorems for curves in homogeneous spaces. **80a:53011**

Jackson, Robert J. V. The Lie derivative as a canonical morphism. **80m:53015**

Krupka, Demeter Elementary theory of differential invariants. **80g:53008**

Lorens, M. (*with* Łubczonok, G.) Matrix bundles and invariants of curvature tensor of a four-dimensional Riemannian space. **80a:53012**

Łubczonok, G. *See* **Lorens, M., 80a:53012**

Secondary classifications:

Dragon, N. Torsion and curvature in extended supergravity. **(80g:83032)**
Jappa, Ju. A. *See* **Stepanov, V. E., (80d:83066)**
Karolska, Z. On some two functional equations in the theory of geometric objects. **(80j:39015)**
Kucharzewski, Mieczysław Orientability of n-dimensional projective geometry. **(80k:51023)**
Lindström, Ulf *See* **Roček, Martin, (80g:83029)**
Roček, Martin (*with* Lindström, Ulf) More components of superspace. **(80g:83029)**
Romano, Antonio Proof that the formulations of the electrodynamics of moving bodies are equivalent. **(80l:78004)**
Stepanov, V. E. (*with* Jappa, Ju. A.) The Lie derivative of geometric objects (on the tetrad formulation of gravitational theory). (Russian. English summary) **(80d:83066)**

53A60 Geometry of webs [See also 14C21, 20N05.]

Abramov, A. V. Some questions of the geometry of ∇-conjugate nets. (Russian) **80j:53020**
Chern, Shiing Shen (*with* Griffiths, Phillip A.) An inequality for the rank of a web and webs of maximum rank. **80b:53009**
(*with* Griffiths, Phillip A.) Abel's theorem and webs. **80b:53008**
Griffiths, Phillip A. *See* **Chern, Shiing Shen, 80b:53008** *and* **Chern, Shiing Shen, 80b:53009**
Padervinskas, V. V. n-dimensional isogonal nets in rhombahedral isogonal nets in n-dimensional Euclidean space. (Russian. Lithuanian and English summaries) **80k:53024**
Veselova, O. M. Some special cases of holonomic nets in the space E_3. (Russian) **80f:53013**

53A99 None of the above, but in this section

Andreev, B. A. The differentiable correspondence between a point space and the manifold $R_H(Q)$ of hyperquadrics of an affine space. (Russian) **80f:53008**
Fomina, T. N. *See* **Korolev, E. A., 80k:53025**
Korolev, E. A. (*with* Fomina, T. N.) Minimal Peterson surfaces. (Russian) **80k:53025**
Šurygin, V. V. Analytic subspaces of spaces over algebras. (Russian) **80e:53011**

Secondary classifications:

Guggenheimer, H. Contact elements, contact correspondences, and contact invariants. (Italian summary) **(80k:58010)**
Kembhavi, A. K. *See* **Lord, E. A., (80a:83019)**
Lord, E. A. (*with* Kembhavi, A. K.) A conformally invariant theory of gravitation. **(80a:83019)**

53Bxx Local differential geometry

53B05 Linear and affine connections

Aminova, A. V. Groups of almost projective motions of spaces with affine connection. (Russian) **80k:53026**
Baglaasarjan, Ž. N. Invariant affine connections on a hypersurface in P_n, framed by a family of cones. (Russian) **80g:53009**
Buchner, K. Affinzusammenhänge in symplektischen Räumen. **80a:53013**
Edelen, Dominic G. B. On the affine connections that give rise to a given curvature. **80a:53014**
Enghiş, Pavel *See* **Sandovici, Profira; et al., 80d:53012**
Mlačič, S. M. New Ricci type identities in a subspace of a space with asymmetric affine connection. (Russian) **80k:53027**
Mocică, Gheorghe On almost contact affine connections in orthogonal congruences. (Romanian. English summary) **80k:53029**
Sur la dérivée Lie dans les espaces non holonomes. **80k:53028**
Sandovici, Profira (*with* Enghiş, Pavel; Ţarină, M.) Espaces A_2-récurrents. **80d:53012**
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Teodorescu, Ion D. On characteristic curves. (Romanian. French summary) **80e:53009**
Tokarczyk, Czesława General Podkovyrin connections. (Russian) **80e:53012**
Vrănceanu, Gheorghe Invariants centro-affines d'une surface. **80k:53030**

Secondary classifications:

Datta, D. K. 2-recurrent tensors on a linearly connected manifold. **(80h:53030)**
De Sabbata, V. (*with* Gasperini, M.) External torsion and the electromagnetic force. **(80a:83069)**
Egiazarjan, K. M. Projection of invariant connections on principal fiber spaces. (Russian) **(80d:53024)**
Epstein, Kenneth J. Affine connections in special relativity. **(80c:83002)**
Gasperini, M. *See* **De Sabbata, V., (80a:83069)**
Mecklenburg, W. (*with* O'Brien, D. P.) Gauge field masses and degenerate potentials. **(80c:81082)**
O'Brien, D. P. *See* **Mecklenburg, W., (80c:81082)**
Papapetrou, Achille (*with* Stachel, John J.) A new Lagrangian for the vacuum Einstein equations and its tetrad form. **(80b:83004)**
Shibuya, Yhuji Real submanifolds in a quaternionic projective space. **(80c:53019)**
Stachel, John J. *See* **Papapetrou, Achille, (80b:83004)**
(Tzitzéica, G.) *See* **Vrănceanu, Gheorghe, (80i:01013)**
Vrănceanu, Gheorghe Tzitzéica fondateur de la géométrie centro-affine. **(80i:01013)**

53B10 Projective connections

Chern, Shiing Shen On projective connections and projective relativity. **80k:53031**
Norden, A. P. Multiple decompositions and the theory of distributions. (Russian) **80f:53014**

Secondary classifications:

Arcidiacono, Giuseppe The de Sitter universe and "projective relativity". (Italian. English summary) **(80d:83090)**
Norden, A. P. The theory of compositions. (Russian) **(80m:53016)**
Decompositions of a projective space. (Russian) **(80k:53005)**

53B15 Other connections

Bury, Teresa Necessary and sufficient conditions for the existence of linear connection determined by the field of a tensor of type (1, 1) covariantly constant in the three-dimensional space. **80k:53009**
Čakmazjan, A. V. Connections in the normal bundles of a normalized submanifold V_m in P_n. (Russian) **80f:53010**
Codău, Nicolae (*with* Teodorescu, Ion D.) Sur les courbes caractéristiques d'une variété différentiable relatives à une algèbre de déformation. **80k:53032**
Imai, Tyuiti Infinitesimal variations of generalized Tzitzéica connections. **80k:53010**
Khan, T. A. *See* **Pande, H. D., 80c:53031**
Kilp, H. The geometry of systems of first-order quasilinear partial differential equations with two independent variables and with different characteristics. (Russian. Estonian and English summaries) **80c:53010**
Moór, Arthur Über nicht-holonome Ötsukische Räume. **80k:53015**
Über die Veränderung der Länge der Vektoren in Weyl-Ötsukischen Räumen. **80k:53016**
Norden, A. P. The theory of compositions. (Russian) **80m:53016**
Compositions of a vector bundle. (Russian) **80g:53010**
Pande, H. D. (*with* Khan, T. A.) Lie derivative in special Kawaguchi space. **80c:53031**
Rastogi, S. C. On quarter-symmetric metric connection. **80f:53015**
Rogovoi, M. R. Conjugate and biconjugate directions of the nonholonomic manifold V_n^{n-1} in E_n. (Russian) **80h:53017**
Singh, U. P. (*with* Srivastava, R. J.) On induced theory of semi-symmetric and quarter-symmetric linear connections. **80e:53013**
Spesivöhh, V. Quasiconnections and pseudoconnections in a differentiable bundle. (Russian) **80c:53011**
Srivastava, R. J. *See* **Singh, U. P., 80e:53013**
Teodorescu, Ion D. *See* **Codău, Nicolae, 80k:53032**
Tokarczyk, Czesława The Podkovyrin connections with a torsion. (Polish and Russian summaries) **80f:53011**

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Aragone, C. (*with* Girotti, H. O.) Null-plane dynamics of massive Yang-Mills fields. (Spanish summary) **(80c:81059)**
Burghardt, R. Kovariante Gravitationstheorie mit Yang-Mills-Feldern. II. Zentralsymmetrische Modelle. (English summary) **(80k:83005)**
Girotti, H. O. *See* **Aragone, C., (80c:81059)**
Imai, Tyuiti Applications of complex and contact conformal connections. **(80m:53020)**
Onicescu, Octav (*with* Sofonea, Liviu) Un modèle géométrique à connexions non symétriques et quelques interprétations physiques. **(80m:83043)**
Sofonea, Liviu *See* **Onicescu, Octav, (80m:83043)**

53B20 Local Riemannian geometry

Aldersley, S. J. Comments on certain divergence-free tensor densities in a 3-space. **80g:53011**
Armsen, Moritz Variational theory of Riemannian subspaces. **80c:53012**
Boju, V. Une méthode d'utiliser l'opérateur gradient en géométrie riemannienne. **80b:53011**
Bozonis, P. (*with* Hasanis, Thomas) On homothetic mappings of Riemann spaces. (Greek summary) **80k:53033**
Buchdahl, H. A. Remark on the equation $\delta R^2/\delta g_{ij}=0$. **80c:53014**
On a vector space of C-tensors. **80c:53013**
Černikov, N. A. An affinely connected space with a nonsymmetric tensor field. (Russian) **80h:53018**
Derdziński, Andrzej (*with* Roter, W.) Some theories of conformally symmetric manifolds. **80a:53015**
Dubey, R. S. D. Generalized recurrent spaces. **80k:53034**
Egorov, A. I. Recurrent skew-symmetric tensor in V_4. (Russian) **80m:53017**
Enghiş, Pavel *See* **Manţia, Adriana, 80k:53019**
Eschenburg, Jost-Hinrich Trigonometrische Charakterisierung der Räume konstanter Krümmung. **80f:53016**
Gavrilov, S. P. Riemannian spaces with a dually-recurrent bivector of characteristic [1, 3]. (Russian) **80j:53021**
Hasanis, Thomas *See* **Bozonis, P., 80k:53033**
Kaigorodov, V. R. Riemannian spaces V_n with a perfect holonomy group. (Russian) **80e:53014**
Kitamura, Shin-ichi On a property of a Riemannian space of constant curvature. **80e:53016**
Kora, Mitsuru On projective Killing tensor in a Riemannian manifold. **80e:53015**
Manţia, Adriana (*with* Enghiş, Pavel) On conformal-recurrent spaces. (Romanian. French summary) **80k:53019**
Miyazawa, Teturo Some theorems on conformally symmetric spaces. **80a:53017**
On projectively recurrent spaces. **80a:53018**
Nediţă, Nicolae I. Variété riemannienne ou pseudo-riemannienne à champ vectoriel para-récurrent. **80c:53015**
Nicolescu, Liviu Sur les transformations de Nordén-Miron. (Romanian summary) **80a:53019**
Les espaces de Riemann en représentation subgéodésique. **80a:53020**

(*with* Teodorescu, Ion D.) Sur les espaces de Riemann conformément euclidiens. **80j:53022**

Ogawa, Yôsuke On conformally flat spaces with warped product Riemannian metric. **80f:53017**

Ouyang, Chong Zhen Some theorems on Ricci recurrent spaces and Ricci symmetric spaces. (Chinese) **80e:53016**

Podol'skiĭ, V. G. Motions in the tangent bundle of Riemannian spaces. I. (Russian) **80k:53020**

Prasad, Chandra Mani (*with* Srivastava, Ravindra Kumar) On concircular Bianchi and Veblen identities. (Italian summary) **80f:53018**

Reĭetnjak, Ju. G. Differential properties of quasiconformal mappings and conformal mappings of Riemannian spaces. (Russian) **80j:53023**

Roter, W. *See* **Derdziński, Andrzej**, **80a:53015**

Šadnyĭ, V. S. Almost geodesic mappings of Riemannian spaces onto spaces of constant curvature. (Russian) **80b:53012**

Sawaki, Sumio (*with* Sekigawa, Kouei) σ-hypersurfaces in a locally symmetric almost Hermitian manifold. **80b:53013**

Šefel', S. Z. Conformal correspondence of metrics and the smoothness of isometric immersions. (Russian) **80j:53024**

Sekigawa, Kouei *See* **Sawaki, Sumio**, **80b:53013**

Sinha, B. B. Analytic vector fields in almost Sasakian manifold. (Turkish summary) **80e:53017**

Srivastava, Ravindra Kumar *See* **Prasad, Chandra Mani**, **80f:53018**

Teodorescu, Ion D. *See* **Nicolescu, Livin**, **80j:53022**

Toomanian, M. Killing vectorfields and infinitesimal affine transformations on a generalised Riemann extension. **80a:53021**

Turtoi, Adriana La construction d'une métrique d'espace de Wagner sur une variété produit. **80e:53018**

Vanaru, Elena Quasiconnections over particular Riemannian spaces. (Romanian. French summary) **80d:53013**

Vanhecke, Lieven (*with* Willmore, T. J.) Jacobi fields and geodesic spheres. **80f:53019**

Venzi, P. On geodesic mapping in Riemannian and pseudo-Riemannian manifolds. **80a:53022**

Vrănceanu, Gheorghe Algebras associated with Riemannian spaces. (Romanian. French summary) **80a:53023**

Über Riemannsche Räume $V_n^{(1)}$. **80k:53035**

Sur les fondements de la géométrie différentielle. **80k:53036**

Wilkes, J. M. (*with* Zund, J. D.) A note on the Ruse-Lanczos identity. **80a:53024**

Willmore, T. J. *See* **Vanhecke, Lieven**, **80f:53019**

Wrona, W. Some properties of m-directional curvature in Riemannian spaces. **80e:53019a**

An analogue of the generalized Schur's theorem. **80e:53019b**

Yamauchi, Kazunari On infinitesimal projective transformations of a Riemannian manifold with constant scalar curvature. **80m:53018**

Zund, J. D. *See* **Wilkes, J. M.**, **80a:53024**

Secondary classifications:

Bhamra, K. S. *See* **Tiwari, Ramji**, **(80a:83066)**

Cianci, Roberto Note on the conservation laws in general relativity. (Italian. English summary) **(80i:83018)**

Goenner, H. F. Nonlinear Lagrangians and Einstein spaces. **(80i:83011)**

Iwai, Toshihiro On infinitesimal affine and isometric transformations preserving respective vector fields. **(80c:58010)**

Jaszczak, Marian On harmonic and Killing symmetric tensors in V_n. **(80g:53007)**

Kalnins, E. G. (*with* Miller, Willard, Jr.) R-separation of variables for the four-dimensional flat space Laplace and Hamilton-Jacobi equations. **(80d:22017)**

Lorens, M. (*with* Łubczonok, G.) Matrix bundles and invariants of curvature tensor of a four-dimensional Riemannian space. **(80a:53012)**

Łubczonok, G. *See* **Lorens, M.**, **(80a:53012)**

Maeda, Shigeru On quadratic invariants in a discrete model of mechanical systems. **(80c:70025)**

Miller, Willard, Jr. *See* **Kalnins, E. G.**, **(80d:22017)**

Møller, C. The crisis in the theory of gravitation. **(80m:83041)**

Plebański, Jerzy F. The nondiverging and nontwisting type D electrovac solutions with λ. **(80i:83007)**

Szolcsányi, Endre Hyperflächen mit Riemannscher Massbestimmung im Finslerschen Raum. II. **(80a:53039)**

Tiwari, Ramji (*with* Bhamra, K. S.) Cosmological solutions for the metric representing null radiation. **(80a:83066)**

Vujičić, Veljko A. Quasilinear oscillations of mechanical systems. (Russian. English and Serbo-Croatian summaries) **(80e:70031)**

53B21 Methods of Riemannian geometry

Enghiş, Pavel Subspaces of a K_m^* space. III. Subspaces of a Cartan symmetric K_m^* space. (Romanian. French summary) **80m:53019**

Mihăilescu, Viorel On quaternionic projective space. (Romanian. German summary) **80e:53020**

Udeschini Brinis, Elisa A third-order "potential" tensor of the Riemann tensor. I. (Italian. English summary) **80c:53016**

53B25 Local submanifolds [See also 53C40.]

Akiba, Shigeo Normal connections of totally real submanifolds in a complex space form. **80g:53012**

Amur, Krishna (*with* Pujar, S. S.) On conformally flat submanifolds. **80a:53025**

(*with* Pujar, S. S.) On submanifolds of a Riemannian manifold admitting a metric semisymmetric connection. **80i:53012**

Arca, Giuseppe (*with* Matzeu, Paola Maria) Hypersphères portant un champ tangentiel quasi-parallèle par rapport à la normale. **80h:53021**

Balazjuk, T. N. *See* **Ostianu, N. M.**, **80g:53014**

Barbosa, João Lucas Marquês (*with* do Carmo, Manfredo P.) A necessary condition for a metric in M^n to be minimally immersed in $\mathbf{R}^{n+1}$. **80e:53021**

Barros, M. (*with* Verstraelen, Leopold) A characterization of totally cylindrical submanifolds. **80j:53025**

do Carmo, Manfredo P. *See* **Barbosa, João Lucas Marquês**, **80e:53021**

Curras Bosch, Carlos On isometric immersions of Riemannian manifolds in Euclidean spaces. (Spanish) **80d:53014**

Delgado, J. A. Rigidity of isometric immersions. (Portuguese) **80i:53013**

De Meulemeester, Willy (*with* Verstraelen, Leopold) Codimension 2 submanifolds with a 2-quasi-umbilical normal direction. **80c:53017**

Dobrovol'skiĭ, V. O. Conformally-flat V_n ($n>3$) of first immersion class. (Russian) **80j:53026**

Farafonova, G. M. Egorov transformations in E_3 and E_4. (Russian) **80k:53037**

Fomenko, V. T. Some properties of two-dimensional surfaces with a zero normal torsion in E^4. (Russian) **80b:53014**

Imai, Tyuiti Applications of complex and contact conformal connections. **80m:53020**

Ishihara, Ikuo Anti-invariant submanifolds of a Sasakian space form. **80k:53038**

Kamaev, V. A. Rotatable Codazzi nets. (Russian) **80g:53013**

Ki, U Hang (*with* Kim, Jae Ryong) Infinitesimal CL-variations of Sasakian hypersurfaces of a Kaehlerian manifold. **80k:53039**

Kim, Jae Ryong *See* **Ki, U Hang**, **80k:53039**

Kon, Masahiro *See* **Yano, Kentaro**, **80d:53015**

Kwon, Young K. *See* **Pak, Jin Suk**, **80k:53040**

Matzeu, Paola Maria *See* **Arca, Giuseppe**, **80h:53021**

Mutō, Yosio Deformability of a submanifold in a Euclidean space whose image by the Gauss map is fixed. **80j:53027**

Nediță, Nicolae I. Surfaces riemanniennes ou pseudoriemanniennes portant des champs concourants ou isotropes concourants. **80m:53021**

Olszak, Zbigniew Remarks on manifolds admitting totally umbilical hypersurfaces. **80a:53026**

Ostianu, N. M. (*with* Balazjuk, T. N.) Manifolds that are immersed into spaces with a projective structure. (Russian) **80g:53014**

Pak, Eulyong On the infinitesimal variations under some conditions in the Riemannian manifold and its submanifolds. **80c:53018**

Pak, Jin Suk (*with* Kwon, Young K.) Anti-holomorphic submanifolds of a Sasakian manifold with vanishing C-Bochner curvature tensor. **80k:53040**

Prasad, B. N. Conformal transformations associated with sets of n fundamental forms of Riemannian hypersurface. **80e:53022**

Pujar, S. S. *See* **Amur, Krishna**, **80a:53025** *and* **Amur, Krishna**, **80i:53012**

Shibuya, Yhaji Real submanifolds in a quaternionic projective space. **80c:53019**

Stoljarov, A. V. Differential geometry of bands. (Russian) **80e:53023**

Tenenblat, Keti Bäcklund's theorem for n-dimensional submanifolds of space forms. **80k:53041**

Thas, C. Minimal monosystems. **80g:53015**

Verstraelen, Leopold *See* **De Meulemeester, Willy**, **80c:53017** *and* **Barros, M.**, **80j:53025**

Virlan, Ion On certain Chern-Vranceanu spaces. **80e:53024**

Yano, Kentaro (*with* Kon, Masahiro) Infinitesimal variations of submanifolds of an even-dimensional sphere. **80d:53015**

Secondary classifications:

Afwat, Mohamed (*with* Švec, Alois) Global differential geometry of hypersurfaces. (Czech and Russian summaries) **(80g:53040)**

Ambar, M. (*with* Upadhyaya, K. S.) Compatibility conditions for the surface of discontinuity in pseudoflow. **(80k:76052)**

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53C30 Homogeneous manifolds [See also 14M15, 14M17, 32M10, 57T15.]

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53C45 Global surface theory (convex surfaces à la A. D. Aleksandrov)

Alexander, Stephanie Local and global convexity in complete Riemannian manifolds. **80b:53040**

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53C50 Lorentz manifolds, manifolds with indefinite metrics

Amato, Francesco Espace-temps à champs isotropes commutatifs. (English summary) **80a:53048**

Arca, Giuseppe (*with* Ben Salem, Moncef) Variétés lorentziennes structurées par une connexion conforme spatiale principale. (English summary) **80b:53066**

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53C55 Hermitian and Kählerian manifolds [See also 32Cxx.]

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53C60 Finsler spaces and generalizations (areal metrics) [See also 58B20.]

Akbar-Zadeh, Hassan (*with* Węgrzynowska, A.) Sur la géométrie du fibré tangent à une variété finslérienne. **80h:53072**
Sur les espaces de Finsler isotropes. (English summary) **80e:53065**
Ghinea, Ioan Connexions finslériennes presque symplectiques. (Romanian summary) **80a:53079**
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53C65 Integral geometry [See also 52A22, 60D05.]; differential forms, currents, etc. [See mainly 58Axx.]

Beil'kin, G. Ja. Stability and uniqueness of the solution of the inverse kinematic problem of seismology in higher dimensions. (Russian. English summary) **80m:53052**
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53C70 Direct methods (G-spaces of Busemann, etc.)

Barthel, Woldemar (*with* Pabel, Helmut) Zur Kurventheorie in der vierdimensionalen metrischen Differentialgeometrie. **80e:53068**
Berestovskiĭ, V. N. Busemann homogeneous G-spaces. (Russian) **80k:53104**
Busemann, H. (*with* Phadke, B. B.) Minkowskian geometry, convexity conditions and the parallel axiom. **80d:53043**
Ettlinger, William A. On arc length sharpenings. **80a:53081**
Gurevič, V. L. Kinematics of bounded curvature. (Russian) **80h:53074**

Konik, Tadeusz On the symmetry and transitivity of tangency relation in a metric space. (Polish summary) **(80d:53044)**
Nikolaev, I. G. Space of directions at a point of a space of curvature not greater than K. (Russian) **(80d:53045)**
Pabel, Helmut *See* **Barthel, Woldemar, (80c:53068)**
Phadke, B. B. *See* **Busemann, H., (80d:53043)**
Pogorelov, A. V. ★Hilbert's fourth problem. **(80j:53066)**
(Silverman, Richard A.) *See* **Pogorelov, A. V., (80j:53066)**

Secondary classifications:

Efremovič, V. A. *See* **Vaĭnšteĭn, A. G.; et al., (80c:54027)**
Gurevič, V. L. Two-dimensional manifolds of bounded curvature. (Russian) **(80j:53028)**
Indow, Tarow Alleys in visual space. **(80e:92045)**
Loginov, È. A. *See* **Vaĭnšteĭn, A. G.; et al., (80c:54027)**
Osserman, Robert Bonnesen-style isoperimetric inequalities. **(80h:52013)**
Vaĭnšteĭn, A. G. (*with* Efremovič, V. A.; Loginov, È. A.) Points at infinity of metric spaces. (Russian) **(80c:54027)**

53C75 Geometric orders, order geometry [See also 51Lxx.]

Bieztriczky, Tibor Surfaces of order three with a peak. I. **(80b:53046)**
Surfaces of order three with a peak. II. **(80b:53047)**
Biplanar surfaces of order three. **(80m:53053)**
Uniplanar surfaces of order three. **(80m:53053)**
On the lines of a surface of order three. **(80k:53105)**
Haupt, Otto Differenzierbare ordnungshomogene Bogen im $\mathbf{R}^n$. **(80b:53048)**
Über ℓ-quasiordinäre Bogen. **(80j:53067)**
See also **Künneth, Hermann, (80i:53034)**
Künneth, Hermann Über Kontinua im P_n vom schwachen Punktordnungswert $n+1$. **(80i:53034)**
(Schenkel, Antonie) *See* **Künneth, Hermann, (80i:53034)**
Spaar, G. A least upper bound for the number of singular points on normal arcs and curves of cyclic order four. **(80c:53078)**

Secondary classifications:

Frank, Hubert (*with* Giering, Oswald) Regelflächen mit Zentralräumen. **(80k:53004)**
Giering, Oswald *See* **Frank, Hubert, (80k:53004)**
Grochulski, J. (*with* Konik, Tadeusz; Tkacz, M.) On some relations of tangency of arcs in metric spaces. **(80i:51023)**
Konik, Tadeusz *See* **Grochulski, J.; et al., (80i:51023)**
Tkacz, M. *See* **Grochulski, J.; et al., (80i:51023)**

53C80 Applications to physics

Fronsdal, Christian Invariant $*$-product quantization of the one-dimensional Kepler problem. **(80m:53054)**

Secondary classifications:

Aleksandrov, A. N. (*with* Piragas, K. A.) Geodesic structure. I. Reciprocal dynamics of geodesics. (Russian. English summary) **(80d:83019)**
Ashtekar, Abhay (*with* Magnon-Ashtekar, Anne) Erratum: "Energy-momentum in general relativity" [Phys. Rev. Lett. **43** (1979), no. 3, 181–184; MR 80d:83029]. **(80i:83024)**
Asorey, M. (*with* Boya, L. J.) Difference of observability between classical electromagnetic and gravitational gauge fields. **(80m:83010)**
Bacry, H. (*with* Nuyts, J.) Pure classical SU(2) Yang-Mills theory with potentials invariant under a U(1) gauge subgroup. **(80b:81046)**
Baĭkov, V. I. (*with* Matveev, G. G.) Shear-free motions in a gravitational field. (Russian) **(80d:83049)**
Belger, Martin Geodätische Formen auf pseudoriemannschen Räumen. **(80f:53038)**
Bloom, Frederick ★Modern differential geometric techniques in the theory of continuous distributions of dislocations. **(80k:73001)**
Bochove, Erik Geometrical optics field of general optical systems. **(80d:78002)**
Boya, L. J. *See* **Asorey, M., (80m:83010)**
Caviglia, Giacomo (*with* Zordan, Clara) Liénard-Wiechert fields in general relativity. (Italian summary) **(80m:83014)**
Chen, Shi (*with* Li, Gen Dao; Guo, Han Ying) A theory of conformal gravity. (Chinese. English summary) **(80k:83027a)**
(*with* Li, Gen Dao; Guo, Han Ying) A theory of conformal supergravity. (Chinese. English summary) **(80k:83027b)**
Chiba, Jiro *See* **Obata, Tsunehiro, (80i:83030)**
Chodos, Alan Conserved quantities in classical Yang-Mills theory. **(80k:81087)**
Collins, C. B. (*with* Ellis, G. F. R.) Singularities in Bianchi cosmologies. **(80i:83041)**
Critchley, Raymond The trace anomaly: results for spinor fields in six dimensions. **(80c:83018)**
Das, Anadijiban (*with* Kaku, M.) Observations on the Gribov ambiguity in general relativity in the Coulomb gauge. (Italian summary) **(80d:83041)**
Dodson, Cristopher T. J. Space-time edge geometry. **(80f:83017)**
Duggal, K. L. Existence of two Killing vector fields on the space-time of general relativity. **(80c:83028)**
On the four-current source of the electromagnetic fields. **(80m:83018)**
Ellis, G. F. R. *See* **Collins, C. B., (80i:83041)**
Faddeev, L. L. *See* **Slavnov, A. A., (80m:81053)**
Fang, J. (*with* Fronsdal, Christian) Deformations of gauge groups. Gravitation. **(80j:83014)**
Finley, J. D., III (*with* Plebański, Jerzy F.) The classification of all $\mathcal{H}$ spaces admitting a Killing vector. **(80g:83005)**
Frolov, V. P. Null surface quantization and quantum field theory in asymptotically flat space-time. **(80h:81090)**
Fronsdal, Christian Singletons and massless, integral-spin fields on de Sitter space. **(80m:81129)**
See also **Fang, J., (80j:83014)**
Gallone, S. An extrinsic aspect of geometrodynamics. (Italian and Russian summaries) **(80d:83083)**
Gu, Chao Hao Breaking of symmetry and dual charges in gauge fields. (Chinese) **(80d:81090)**
Gunzig, E. (*with* Nardone, P.) Symmetry constraints in general relativity and the Schwarzschild interior metric. **(80j:83009)**
Guo, Han Ying *See* **Yan, Mu Lin; et al., (80j:83019); Chen, Shi; et al., (80k:83027a)** *and* **Chen, Shi; et al., (80k:83027b)**
Gutt, Simone Equivalence of deformations and associated $*$-products. **(80m:53033)**
Hamamoto, Shinji The structure of general covariance group on superspace. **(80i:81086)**
't Hooft, G. A property of electric and magnetic flux in non-Abelian gauge theories. **(80g:81043)**
Kaku, M. *See* **Das, Anadijiban, (80d:83041)**
Kawai, Toshiharu (*with* Yoshida, Hideo) de Sitter gauge theory of gravitation. **(80h:83016)**
Klotz, A. H. *See* **Radford, C. J., (80c:83040)**
Kugo, Taichiro (*with* Ojima, Izumi) Manifestly covariant canonical formulation of Yang-Mills field theories. II. SU(2) Higgs-Kibble model with spontaneous symmetry breaking. **(80k:81102)**
Li, Gen Dao *See* **Chen, Shi; et al., (80k:83027a)** *and* **Chen, Shi; et al., (80k:83027b)**
Lüscher, M. Asymptotic behaviour of classical Yang-Mills fields in Minkowski space. **(80f:81069)**
Magnon-Ashtekar, Anne *See* **Ashtekar, Abhay, (80i:83024)**
Maison, H. Dieter On the complete integrability of the stationary, axially symmetric Einstein equations. **(80e:83027)**
Mamaev, S. G. (*with* Trunov, N. N.) The dependence of vacuum expectation values of the stress-energy tensor upon the geometry and the topology of the manifold. (Russian. English summary) **(80i:83028)**
Matveev, G. G. *See* **Baĭkov, V. I., (80d:83049)**
McKeon, Gerry An extended vector theory. **(80j:81062)**
Menskiĭ, M. B. Application of the group of paths to the gauge theory and quarks. **(80m:81095)**
Mercier, André (*with* Treder, Hans-Jürgen; Yourgrau, W.) ★On general relativity. **(80e:83028)**
Meyers, C. (*with* de Roo, M.) New explicit instantons and the geometry of the parameter space. **(80d:81115)**
Modugno, Marco (*with* Stefani, Gianna) On the geometrical structure of shock waves in general relativity. **(80g:83021)**
Moncrief, Vincent Quantum linearization instabilities. **(80e:83018)**
Nakanishi, Noboru Indefinite-metric quantum field theory of general relativity. III. Poincaré generators. **(80g:83016a)**
Indefinite-metric quantum field theory of general relativity. IV. Background curved space-time. **(80g:83016b)**
Nardone, P. *See* **Gunzig, E., (80j:83009)**
Ne'eman, Yuval (*with* Regge, T.) Gauge theory of gravity and supergravity on a group manifold. **(80c:17005)**
van Nieuwenhuizen, P. *See* **Townsend, P. K., (80c:81140)**
Nuyts, J. *See* **Bacry, H., (80b:81046)**
Obata, Tsunehiro (*with* Chiba, Jiro) Variational principle for gravitational equations of the Bianchi identity type. **(80i:83030)**
Ojima, Izumi *See* **Kugo, Taichiro, (80k:81102)**
Okawa, Masanori *See* **Seo, Koichi; et al., (80g:81048)**
Papadopoulos, D. *See* **Persides, S., (80m:83034)**
Papapetrou, Achille Perturbations des solutions cosmologiques homogènes et isotropes. (Italian and English summaries) **(80d:83094)**
Parfovskiĭ, S. L. Motion of particles in the field of a naked singularity of Kasner type with complex or equal exponents. **(80j:83006)**
Persides, S. (*with* Papadopoulos, D.) A covariant formulation of the Landau-Lifshitz complex. **(80m:83034)**
A definition of asymptotically Minkowskian space-times. **(80j:83011)**
Piragas, K. A. *See* **Aleksandrov, A. N., (80d:83019)**
Piragas, L. E. Nonlinear effects in the relative dynamics of test bodies in general relativity. I. The second approximation for unperturbed systems. (Russian) **(80f:83012a)**
Nonlinear effects in the relative dynamics of test bodies in general relativity. II. The influence of small perturbing forces. (Russian) **(80f:83012b)**
Plebański, Jerzy F. *See* **Finley, J. D., III, (80g:83005)**
Pommaret, Jean-François Physics and pseudogroups. **(80h:58060)**
Radford, C. J. (*with* Klotz, A. H.) Geometric properties of Dirac fields in a Riemannian space-time. I. **(80c:83040)**
Regge, T. *See* **Ne'eman, Yuval, (80c:17005)**
de Roo, M. *See* **Meyers, C., (80d:81115)**
Rosenbaum, Marcos (*with* Ryan, Michael P., Jr.; Shepley, L. C.) Space-time homogeneous models with torsion. **(80d:83095)**
Rund, Hanno Variational derivation and uniqueness of the equations of motion of a particle in a classical gauge field. **(80d:81082)**
Representations of the duals of gauge field tensors. **(80i:81037)**
Ryan, Michael P., Jr. *See* **Rosenbaum, Marcos; et al., (80d:83095)**
Seo, Koichi (*with* Okawa, Masanori; Sugamoto, Akio) Dual transformation in non-Abelian gauge theories. **(80g:81048)**
Sharp, N. A. Geodesics in black hole space-times. **(80g:83037)**
Shepley, L. C. *See* **Rosenbaum, Marcos; et al., (80d:83095)**
Singer, Isadore Some remarks on the Gribov ambiguity. **(80d:53025)**
Slavnov, A. A. (*with* Faddeev, L. L.) ★Введение в квантовую теорию калибровочных полей. (Russian) [Introduction to the quantum theory of gauge fields] **(80m:81053)**
Stefani, Gianna *See* **Modugno, Marco, (80g:83021)**
Sugamoto, Akio *See* **Seo, Koichi; et al., (80g:81048)**

Townsend, P. K. (*with* van Nieuwenhuizen, P.) Simplifications of conformal supergravity. **(80c:81140)**
Trautman, Andrzej A class of null solutions to Yang-Mills equations. **(80m:81055)**
Treder, Hans-Jürgen *See* **Mercier, André; et al., (80e:83028)**
Trunov, N. N. *See* **Mamaev, S. G., (80i:83028)**
Yan, Mu Lin (*with* Zhao, Bao Heng; Guo, Han Ying) Renormalization of a gravitational field with torsion. (Chinese. English summary) **(80j:83019)**
Yoneya, Tamiaki $Z(N)$ topological excitations in Yang-Mills theories: duality and confinement. **(80m:81057)**
Yoshida, Hideo *See* **Kawai, Toshiharu, (80h:83016)**
Yourgrau, W. *See* **Mercier, André; et al., (80e:83028)**
Zhao, Bao Heng *See* **Yan, Mu Lin; et al., (80j:83019)**
Zordan, Clara *See* **Caviglia, Giacomo, (80m:83014)**

53C99 None of the above, but in this section

Barbosa, João Lucas Marquês (*with* do Carmo, Manfredo P.) A proof of a general isoperimetric inequality for surfaces. **80f:53043**
do Carmo, Manfredo P. *See* **Barbosa, João Lucas Marquês, 80f:53043**
Escobales, Richard H., Jr. Riemannian submersions from complex projective space. **80k:53106**
Greene, R. E. (*with* Wu, H.) C^∞ approximations of convex, subharmonic, and plurisubharmonic functions. **80m:53055**
Matsuda, Akira Transformations from concurrent charts into tangential contact circular charts. (Romanian summary) **80d:53046**
Parker, George Divergence free vector fields and Bochner's theorems. (Russian summary) **80f:53044**
Wu, H. *See* **Greene, R. E., 80m:53055**

Secondary classifications:

Bass, Hyman Growth of finitely generated groups. **(80d:20034)**
Curtis, W. D. (*with* Lerner, D. E.; Miller, F. R.) Complex pp waves and the nonlinear graviton construction. **(80a:83016)**
Gidas, Basilis Deformations and spectral properties of merons. **(80k:81093)**
Komrakov, B. P. ★Структуры на многообразиях и однородные пространства. (Russian) [Structures on manifolds and homogeneous spaces] **(80h:53001)**
Lerner, D. E. *See* **Curtis, W. D.; et al., (80a:83016)**
Miller, F. R. *See* **Curtis, W. D.; et al., (80a:83016)**

54-XX GENERAL TOPOLOGY {For the topology of manifolds of all dimensions, see 57Nxx.}

54-01 Elementary exposition, textbooks

Adámek, Jiří (*with* Koubek, Václav; Reiterman, Jan) ★Základy obecné topologie. (Czech) [Lectures in general topology] **80f:54001**
Cigler, Johann (*with* Reichel, Hans-Christian) ★Topologie. **80d:54001**
Duda, Edwin *See* **Whyburn, Gordon, 80e:54001**
Husain, Taqdir ★Topology and maps. **80h:54001**
(Kelley, John L.) *See* **Whyburn, Gordon; et al., 80e:54001**
Koubek, Václav *See* **Adámek, Jiří; et al., 80f:54001**
Reichel, Hans-Christian *See* **Cigler, Johann, 80d:54001**
Reiterman, Jan *See* **Adámek, Jiří; et al., 80f:54001**
Seebach, J. Arthur, Jr. *See* **Steen, Lynn Arthur, 80a:54001**
Steen, Lynn Arthur (*with* Seebach, J. Arthur, Jr.) ★Counterexamples in topology. **80a:54001**
Whyburn, Gordon (*with* Duda, Edwin) ★Dynamic topology. **80e:54001**
Countable product spaces *See* **Family of countable product spaces, 80e:54002**
Family of countable product spaces ★The family of countable product spaces. (Japanese) **80e:54002**
Kyoto *See* **Family of countable product spaces, 80e:54002**
Symposium:
Family of Countable Product Spaces *See* **Family of countable product spaces, 80e:54002**

Secondary classifications:

Gähler, Werner ★Grundstrukturen der Analysis. Band I. **(80i:58001a)**
★Grundstrukturen der Analysis. II. **(80i:58001b)**

54-02 Advanced exposition (research surveys, monographs, etc.)

Secondary classifications:

Arhangel'skiĭ, A. V. The structure and classification of topological spaces and cardinal invariants. (Russian) **(80i:54005)**
Dydak, Jerzy (*with* Segal, Jack) ★Shape theory. **(80h:54020)**
Segal, Jack *See* **Dydak, Jerzy, (80h:54020)**

54-03 Historical (must also be assigned at least one classification number from Section 01)

McAllister, Byron L. Hyperspaces and multifunctions, the first half century (1900–1950). **80g:54001**

Secondary classifications:

Aleksandrov, P. S. ★Теория функций действительного переменного и теория топологических пространств. (Russian) [The theory of functions of a real variable and the theory of topological spaces] **(80f:01024)**
★Избранные труды. (Russian) [Selected works] **(80j:01040)**
See also **Arboleda, L. C., (80b:01014)**
Arboleda, L. C. Les débuts de l'école topologique soviétique: notes sur les lettres de Paul S. Alexandroff et Paul S. Urysohn à Maurice Fréchet. **(80b:01014)**
(Fréchet, Maurice René) *See* **Arboleda, L. C., (80b:01014)**
Freudenthal, H. Topologie in den Niederlanden: das erste Halbjahrhundert. **(80g:01017)**
Johnson, Dale M. The problem of the invariance of dimension in the growth of modern topology. I. **(80k:01034)**
Jones, F. Burton Wilder on connectedness. **(80f:01019b)**
(Kolmogorov, A. N.) *See* **Aleksandrov, P. S., (80f:01024)** *and* **Aleksandrov, P. S., (80j:01040)**
Kurepa, Đuro Genesis of uniform spaces. **(80j:54021)**
(Mal'cev, A. A.) *See* **Aleksandrov, P. S., (80j:01040)**
(Pontrjagin, L. S.) *See* **Aleksandrov, P. S., (80j:01040)**
(Tihonov, A. N.) *See* **Aleksandrov, P. S., (80j:01040)**
(Uryson, P. S.) *See* **Arboleda, L. C., (80b:01014)**
Whyburn, Lucille Letters from the R. L. Moore papers. **(80k:01059)**
Wilder, R. L. Evolution of the topological concept of "connected". **(80f:01019a)**
See also **Jones, F. Burton, (80f:01019b)**

54-04 Explicit machine computation and programs (not the theory of computation or programming)

54-06 Proceedings, conferences, etc.

(Kuperberg, Włodzimierz) *See* **Proceedings: Topology Conference, 80i:54001a; Proceedings: Topology Conference, 80i:54001b; Proceedings: Topology Conference, 80i:54002a** *and* **Proceedings: Topology Conference, 80i:54002b**
(Reed, George M.) *See* **Proceedings: Topology Conference, 80i:54001a; Proceedings: Topology Conference, 80i:54001b; Proceedings: Topology Conference, 80i:54002a; Proceedings: Topology Conference, 80i:54002b** *and* **Surveys in general topology, 80m:54001**
(Rjabuhin, Ju. M.) *See* **Topological spaces and algebraic systems, 80m:54002**
(Zenor, Phillip) *See* **Proceedings: Topology Conference, 80i:54001a; Proceedings: Topology Conference, 80i:54001b; Proceedings: Topology Conference, 80i:54002a** *and* **Proceedings: Topology Conference, 80i:54002b**
Algebraic systems *See* **Topological spaces and algebraic systems, 80m:54002**
Baton Rouge, La. *See* **Proceedings: Topology Conference, 80i:54001a** *and* **Proceedings: Topology Conference, 80i:54001b**
Conference:
Topology *See* **Proceedings: Topology Conference, 80i:54001a; Proceedings: Topology Conference, 80i:54001b; Proceedings: Topology Conference, 80i:54002a** *and* **Proceedings: Topology Conference, 80i:54002b**
Norman, Okla. *See* **Proceedings: Topology Conference, 80i:54002a** *and* **Proceedings: Topology Conference, 80i:54002b**
Proceedings:
Topology Conference ★The Proceedings of the 1977 Topology Conference. I. **80i:54001a**
★The Proceedings of the 1977 Topology Conference. II. **80i:54001b**
★The Proceedings of the 1978 Topology Conference. I. **80i:54002a**
★The Proceedings of the 1978 Topology Conference. II. **80i:54002b**
Surveys in general topology ★Surveys in general topology. **80m:54001**
Topological spaces and algebraic systems ★Топологические пространства и алгебраические системы. (Russian) [Topological spaces and algebraic systems] **80m:54002**
Topology *See* **Proceedings: Topology Conference, 80i:54001a; Proceedings: Topology Conference, 80i:54001b; Proceedings: Topology Conference, 80i:54002a; Proceedings: Topology Conference, 80i:54002b** *and* **Surveys in general topology, 80m:54001**

54Axx Generalities

54A05 Topological spaces and generalizations (closure spaces, etc.)

Bentley, H. L. (*with* Herrlich, Horst) The reals and the reals. **80a:54002**
Braude, Eric John Co-continuity. I. A Urysohn's lemma for partially ordered sets. **80b:54001**
Calude, Cristian (*with* Căzănescu, Virgil Emil) On topologies generated by Moisil resemblance relations. **80i:54003**
Căzănescu, Virgil Emil *See* **Calude, Cristian, 80i:54003**
Edgar, G. A. Three cryptoisomorphism theorems. **80c:54001**
Eroda-Schechter, Michelline Quasi-systèmes de fermeture. **80a:54003**
Herrlich, Horst *See* **Bentley, H. L., 80a:54002**
Herrmann, Robert A. θ-ridigity and the idempotent θ-closure. **80a:54004**
Ivanov, A. A. Structures of topological type. (Russian. English summary) **80g:54003**
(Kunugui, Kinjirô) *See* **Nakanishi, Shizu, 80f:54002**
Luppi, Carla Relative connections and compactness in topological Heyting algebras. (Italian. English summary) **80a:54005**
Nakanishi, Shizu The method of ranked spaces proposed by Professor Kinjirô Kunugi. **80f:54002**
Némethi, Csaba Characterizations of certain spaces in terms of divergent filters. **80b:54002**
Netzer, Norbert Verallgemeinerte topologische Strukturen. **80d:54002**

Secondary classifications:

Barnett, William A. Random sets and confidence procedures. **(80e:62017)**
Cairo, Luisella (*with* Cerruti, Umberto) Fuzzy relational spaces and algebraic structures. (Italian summary) **(80a:54006)**

Cerruti, Umberto *See* **Calre, Luisella,** (**80a:54006**)
Contessa, Maria (*with* Zanolin, Fabio) On a question of Josef Novák about convergence spaces. (Italian summary) (**80k:54001**)
Frič, Roman (*with* Koutník, Václav) Sequentially complete spaces. (**80i:54032**)
Gardner, R. J. On concentrated sets. (**80b:04005**)
Herrmann, Robert A. Convergence spaces and nonstandard compactifications. (**80g:54058**)
Koutník, Václav *See* **Frič, Roman,** (**80i:54032**)
Marny, Thomas On epireflective subcategories of topological categories. (**80g:18004**)
Stratigos, Panagiotis D. Wallman compactification, Stone-Čech compactification and relative compactness in the vague topology. (**80k:54041**)
Zanolin, Fabio *See* **Contessa, Maria,** (**80k:54001**)

54A10 Change of topology, comparison of topologies

Hoffmann, Rudolf-E. Topological spaces admitting a "dual". **80j:54001**
Iseki, Teiji Notes on regular, R-invariant expansions of topologies. (Japanese summary) **80k:54002**
Levine, Norman Minimal simple extensions of topologies. **80g:54003**
Piastria, F. Connectedness and local connectedness of simple extensions. **80m:54003**

Secondary classifications:

Borevič, Z. I. (*with* Bumagin, V. V.; Rodionov, V. I.) The number of labeled topologies on ten points. (Russian) (**80f:05004**)
Bumagin, V. V. *See* **Borevič, Z. I.; et al.,** (**80f:05004**)
Bumby, R. (*with* Fisher, R.; Levinson, H.; Silverman, Ruth) Topologies on finite sets. (**80k:05008**)
Costovici, Gh. General topological frame for Zariski's topologies. (Romanian summary) (**80k:14003**)
Fisher, R. *See* **Bumby, R.; et al.,** (**80k:05008**)
Ginsburg, John (*with* Sands, Bill) Minimal infinite topological spaces. (**80e:54007**)
Levinson, H. *See* **Bumby, R.; et al.,** (**80k:05008**)
Rodionov, V. I. *See* **Borevič, Z. I.; et al.,** (**80f:05004**)
Sands, Bill *See* **Ginsburg, John,** (**80e:54007**)
Silverman, Ruth *See* **Bumby, R.; et al.,** (**80k:05008**)

54A15 Syntopogeneous structures

Burgess, D. C. J. (*with* Fitzpatrick, M.) Locally convex syntopogenous spaces. **80c:54002**
Fitzpatrick, M. *See* **Burgess, D. C. J.,** **80c:54002**

54A20 Convergence (general theory) and limits

Brunet, Bernard Sur la classe des morphismes propres dans la catégorie des espaces de convergence. **80g:54004**
Contessa, Maria (*with* Zanolin, Fabio) On a question of Josef Novák about convergence spaces. (Italian summary) **80k:54001**
Frič, Roman On convergence spaces and groups. (Russian summary) **80m:54004**
Hudaiberdiev, V. N. A generalization of the concept of convergence. (Russian) **80k:54002**
Kent, D. C. (*with* Richardson, G. D.) Compactifications of convergence spaces. **80i:54004**
Prakash, Anand (*with* Srivastava, P.) Relations between convergence, almost convergence and r-convergence. **80e:54003**
Richardson, G. D. *See* **Kent, D. C.,** **80i:54004**
Saks, Victor Ultrafilter invariants in topological spaces. **80h:54003**
Srivastava, P. *See* **Prakash, Anand,** **80e:54003**
Szabó, György (*with* Száz, Árpád) Net convergences and their induced topologies. (Russian summary) **80h:54004**
Száz, Árpád *See* **Szabó, György,** **80h:54004**
Takeuchi, Yu A notion of filters. (Spanish) **80f:54003**
Zanolin, Fabio *See* **Contessa, Maria,** **80k:54001**

Secondary classifications:

Buttazzo, Giuseppe (*with* Dal Maso, Gianni) Γ-limit of a sequence of nonconvex and non-equi-Lipschitz integral functionals. (**80k:54026**)
Dal Maso, Gianni *See* **Buttazzo, Giuseppe,** (**80k:54026**)
Dorsett, Charles Semi-T_2, semi-R_1, and semi-R_0 topological spaces. (**80a:54026**)
Frič, Roman (*with* Koutník, Václav) Sequentially complete spaces. (**80i:54032**)
(*with* Kent, D. C.) Completion functors for Cauchy spaces. (**80m:54042**)
Gazik, R. J. *See* **Kent, D. C.,** (**80b:54029**)
Gerlits, J. Remarks on discrete convergence. (**80m:54024**)
Kent, D. C. (*with* Gazik, R. J.) Minimal uniform convergence spaces. (**80b:54029**)
See also **Frič, Roman,** (**80m:54042**)
Koutník, Václav *See* **Frič, Roman,** (**80i:54032**)
Kumar, Vinod Compactification of a convergence space. (**80c:54019**)
Lowen, Robert Convergence in fuzzy topological spaces. (**80b:54006**)
Marny, Thomas Proximal limit spaces. (**80a:54049**)
Németh, Csaba Characterizations of certain spaces in terms of divergent filters. (**80b:54062**)
Ney, Andrei Problèmes de convergence regardant les séries en espaces topologiques. (**80j:40011**)
Schroder, M. Order-bounded convergence structures on spaces of continuous functions. (**80i:46022**)
Wang, Guo Jun A remark on the connectedness of sets of limit points of sequences. (Chinese) (**80i:54020**)

54A25 Cardinality properties (discrete subsets, weight, etc.), ultrafilters, etc. [See also 03Exx, 04A30.]

Arhangel'skiĭ, A. V. The structure and classification of topological spaces and cardinal invariants. (Russian) **80i:54005**
Cardinal invariants of topological groups. Embeddings and condensations. (Russian) **80m:54005**
A theorem on cardinality. (Russian) **80k:54003**
Balogh, Z. Metrization theorems concerning relative compactness. **80d:54003**
Bell, Murray G. (*with* Ginsburg, John; Woods, R. Grant) Cardinal inequalities for topological spaces involving the weak Lindelof number. **80c:54003**
Blair, Robert L. Proof of a theorem of Burke and Hodel on the cardinality of topological spaces. **80m:54006**
Broverman, S. (*with* Ginsburg, John; Kunen, Kenneth; Tall, Franklin D.) Topologies determined by σ-ideals on ω_1. **80k:54004**
Cater, F. S. (*with* Erdős, Paul; Galvin, Fred) On the density of λ-box products. **80c:54004**
Erdős, Paul *See* **Cater, F. S.; et al.,** **80c:54004**
Ervynck, G. The classification of filters using parameters which are cardinal numbers. **80j:54002**
Fedorčuk, V. V. Fully closed maps, scannable spectra and cardinality of hereditarily separable spaces. **80k:54005**
Frankiewicz, Ryszard A short proof of a cardinal inequality involving homogeneous spaces. **80c:54004**
Galvin, Fred *See* **Cater, F. S.; et al.,** **80c:54004**
Gerlits, J. (*with* Hajnal, A.) On the tightness of product spaces. **80g:54005**
Ginsburg, John *See* **Bell, Murray G.; et al.,** **80c:54003** *and* **Broverman, S.; et al.,** **80k:54004**
Hajnal, A. *See* **Gerlits, J.,** **80g:54005**
Ismail, Mohammad A note on a theorem of Arhangel'skiĭ. **80c:54005**
Kunen, Kenneth *See* **Broverman, S.; et al.,** **80k:54004**
Kurepa, Đuro A classification of topological spaces. Z-number of spaces. **80m:54007**
Meyer, Paul R. (*with* Wilson, Richard G.) Cardinal functions on topological spaces satisfying order conditions. **80e:54005**
Miwa, Takuo An example of a topological space whose cardinality is not inherited by its k-leader. (Japanese) **80b:54003**
Nogura, Tsugunori The Suslin number of power spaces. (Japanese) **80b:54004**
Simon, Petr Left-separated spaces: a comment to a paper "Bicompacta that are representable as the union of a countable number of left subspaces. I, II" (Russian), [Comment. Math. Univ. Carolin. **20** (1979), no. 2, 361–379, 381–395; MR 80e:54029] by M. G. Tkačenko. **80m:54008**
Tall, Franklin D. *See* **Broverman, S.; et al.,** **80k:54004**
Tkačenko, M. G. The behavior of cardinal invariants under the union operation for a chain of spaces. (Russian. English summary) **80j:54003**
See also **Simon, Petr,** **80m:54008**
Willmott, Richard Countable yet nowhere first countable. **80c:54006**
Wilson, Richard G. *See* **Meyer, Paul R.,** **80e:54005**
Woods, R. Grant *See* **Bell, Murray G.; et al.,** **80c:54003**

Secondary classifications:

Balogh, Z. On the structure of spaces which are paracompact p-spaces hereditarily. (**80k:54048**)
Chakraborty, Shyama P. A note on schistic spaces. (**80h:54023**)
Čigogidze, A. Č. The contractions of topological spaces. (Russian. English and Georgian summaries) (**80g:54010**)
Devlin, Keith J. (*with* Shelah, Saharon) Souslin properties and tree topologies. (**80m:54031**)
Filippov, V. P. *See* **Kozlova, Z. I.,** (**80e:54053a**) *and* **Kozlova, Z. I.,** (**80e:54053b**)
Filippov, V. V. (*with* Úry, L.) A theorem on relative universal spaces with given weight and dimension. (**80h:54042**)
Hindman, Neil Partitions and sums and products of integers. (**80b:10022**)
Juhász, I. (*with* Weiss, William) On a problem of Sikorski. (**80g:54006**)
(*with* Nagy, Zs.; Weiss, William) On countably compact, locally countable spaces. (**80h:54025**)
Kozlova, Z. I. (*with* Filippov, V. P.) Classes of projective sets of certain topological spaces of uncountable weight. I. (Russian) (**80e:54053a**)
(*with* Filippov, V. P.) Classes of projective sets of certain topological spaces of uncountable weight. II. (Russian) (**80e:54053b**)
Krivonosov, L. N. Two topological invariants of metrizable spaces and their connection with dimension. (Russian) (**80d:54046**)
Kunen, Kenneth (*with* van Mill, Jan; Mills, Charles F.) On nowhere dense closed P-sets. (**80h:54029**)
Luxemburg, Leonid On universal metric locally finite-dimensional spaces. (**80h:54044**)
Malykhin, V. I. Fréchet-Uryson bicompacts: π-points and Stone-Čech extensions. (Russian) (**80d:54029**)
van Mill, Jan (*with* Mills, Charles F.) On the character of supercompact spaces. (**80k:54037**)
See also **Kunen, Kenneth; et al.,** (**80h:54029**)
Mills, Charles F. *See* **Kunen, Kenneth; et al.,** (**80h:54029**) *and* **van Mill, Jan,** (**80k:54037**)
Młodoszewski, Jerzy On composants of $\beta R - R$. (**80g:54031**)
Nagy, Zs. *See* **Juhász, I.; et al.,** (**80h:54025**)
Pavlovskiĭ, D. S. Spaces of open sets and spaces of continuous functions. (Russian) (**80k:54013**)
Pinus, A. G. Elementary equivalence of topological spaces. (Russian) (**80a:03050**)
Razen, R. A. Transversals and finite topologies. (**80c:05008**)
Roitman, Judy A reformulation of S and L. (**80j:54016**)
Rudin, Mary Ellen *See* **Shelah, Saharon,** (**80k:04002**)
Saks, Victor Ultrafilter invariants in topological spaces. (**80h:54003**)
Šapiro, L. B. On the space of probability measures. (Russian) (**80i:54017**)

Shelah, Saharon (*with* Rudin, Mary Ellen) Unordered types of ultrafilters. **(80k:04002)**
See also **Devlin, Keith J., (80m:54031)**
Swardson, Mary Anne A short proof of Kowalsky's hedgehog theorem. **(80b:54014)**
Úry, L. *See* **Filippov, V. V., (80b:54042)**
de Vries, J. The local weight of an effective locally compact transformation group and the dimension of $L^2(G)$. **(80b:54049)**
Weiss, William *See* **Juhász, I., (80g:54006)** *and* **Juhász, I.; et al., (80h:54025)**

54A35 Consistency and independence results [See also 03E35.]

Juhász, I. (*with* Weiss, William) On a problem of Sikorski. **80g:54006**
Weiss, William *See* **Juhász, I., 80g:54006**

Secondary classifications:

Čertanov, G. I. *See* **Efimov, B. A., (80h:54040)**
Comfort, W. Wistar Deciding some undecidable topological statements. **(80k:03050)**
Devlin, Keith J. Remark on a theorem of D. H. Fremlin concerning K-analytic Hausdorff spaces. **(80j:03076)**
Efimov, B. A. (*with* Čertanov, G. I.) Two properties of the Suslin continuum. (Russian) **(80h:54040)**
Malyhin, V. I. Fréchet-Uryson bicompacts: π-points and Stone-Čech extensions. (Russian) **(80d:54029)**
Mathias, A. R. D. $0^{\#}$ and the p-point problem. **(80f:03062)**
Rudin, Mary Ellen The undecidability of the existence of a perfectly normal nonmetrizable manifold. **(80j:54014)**
Talagrand, Michel Est-ce que l^{∞} est un espace mesurable? (English summary) **(80k:03056)**
Tall, Franklin D. Applications of a generalized Martin's axiom. **(80b:03087)**

54A40 Fuzzy topology [See also 03E72.]

Calre, Luisella (*with* Cerruti, Umberto) Fuzzy relational spaces and algebraic structures. (Italian summary) **80a:54006**
Cerruti, Umberto *See* **Calre, Luisella, 80a:54006**
Foster, David H. Fuzzy topological groups. **80f:54004**
Höhle, Ulrich Probabilistisch kompakte L-unscharfe Mengen. (English summary) **80b:54005**
Probabilistische Topologien. (English summary) **80h:54005**
Hutton, Bruce Products of fuzzy topological spaces. **80m:54009**
Kerre, E. Characterization of normality in fuzzy topological spaces. **80h:54006**
Liu, Ying Ming *See* **Pu, Bao Ming, 80e:54006**
Lowen, Robert A comparison of different compactness notions in fuzzy topological spaces. **80c:54007**
Convergence in fuzzy topological spaces. **80b:54006**
Pu, Bao Ming (*with* Liu, Ying Ming) Product and quotient spaces in fuzzy topology. (Chinese) **80e:54006**

Secondary classifications:

Khalili, Siamak Fuzzy measures and mappings. **(80c:03057)**
Lowen, Robert On fuzzy complements. **(80j:03080)**

54A99 None of the above, but in this section

Ahmad, Naeem Exact sequences of topological spaces. **80c:54008**
Eschgfäller, Josef A remark on the algebraic nature of topology. (Italian summary) **80a:54007**

Secondary classifications:

Chakraborty, Shyama P. A note on schistic spaces. **(80h:54023)**
Fischer, Thomas S. The maximal ideal space of a Bézout ring. **(80b:13002)**
Herrmann, Robert A. rc-convergence. **(80c:54018)**
Makowsky, J. A. The reals cannot be characterized topologically with strictly local properties and countability axioms. **(80h:03055)**
Wicke, Howard H. A functional characterization of primitive base. **(80h:54037)**

54Bxx Basic constructions

54B05 Subspaces

Ginsburg, John (*with* Sands, Bill) Minimal infinite topological spaces. **80e:54007**
Sands, Bill *See* **Ginsburg, John, 80e:54007**

Secondary classifications:

Daverman, Robert J. Shrinkable decompositions of nonmetric manifolds can produce other manifolds. **(80i:57006)**
Ford, Jo (*with* Heath, R. W.) Incompressible spaces. **(80i:54016)**
Heath, R. W. *See* **Ford, Jo, (80i:54016)**

54B10 Product spaces

Bankston, Paul Note on: "Ultraproducts in topology" [General Topology and Appl. 7 (1977), no. 3, 283–308; MR 56 #16554]. **80h:54007**
Gittings, Raymond F. Products of generalized metric spaces. **80d:54004**
Hoshina, Takao (*with* Morita, Kiiti) On rectangular products of topological spaces. **80k:54006**
Hušek, Miroslav (*with* Rice, Michael D.) Productivity of coreflective subcategories of uniform spaces. **80e:54008**
Maharam, Dorothy Realizing automorphisms of category algebras of product spaces. **80d:54005**
(*with* Stone, A. H.) Borel boxes. **80k:54007**
Morita, Kiiti *See* **Hoshina, Takao, 80k:54006**
Nogura, Tsugunori The subsequentiality of product spaces. **80g:54007**
Przymusiński, Teodor C. Topological properties of product spaces and the notion of n-cardinality. **80k:54008**
Normality and paracompactness in finite and countable Cartesian products. **80m:54010**
Rice, Michael D. *See* **Hušek, Miroslav, 80e:54008**
Roitman, Judy More paracompact box products. **80i:54006**
Ščepin, E. V. Sur les applications continues des cubes de Tihonov. (English summary) **80b:54007**
Stone, A. H. *See* **Maharam, Dorothy, 80k:54007**

Secondary classifications:

Alster, K. Some remarks on Eberlein compacts. **(80k:54035)**
Bentley, H. L. (*with* Herrlich, Horst) Completeness is productive. **(80i:54036)**
Ford, Jo (*with* Heath, R. W.) Incompressible spaces. **(80i:54016)**
Gruenhage, Gary A note on the product of Fréchet spaces. **(80k:54054)**
Hadžiivanov, Nikolai G. The product of continua. (Russian) **(80c:54033)**
Heath, R. W. *See* **Ford, Jo, (80i:54016)**
Herrlich, Horst *See* **Bentley, H. L., (80i:54036)**
Hoffmann, Rudolf-E. Topological spaces admitting a "dual". **(80j:54001)**
Höhle, Ulrich Probabilistisch kompakte L-unscharfe Mengen. (English summary) **(80b:54005)**
Hutton, Bruce Products of fuzzy topological spaces. **(80m:54009)**
Kato, Akio Realcompactness of box products. **(80b:54032)**
Kombarov, A. P. A theorem of Corson. (Russian. English summary) **(80c:54016)**
Liu, Ying Ming *See* **Pu, Bao Ming, (80e:54006)**
Malyhin, V. I. $\beta\mathbb{N}$ is prime. (Russian summary) **(80i:54027)**
Pu, Bao Ming (*with* Liu, Ying Ming) Product and quotient spaces in fuzzy topology. (Chinese) **(80e:54006)**
Roitman, Judy Paracompact box products in forcing extensions. **(80j:03078)**
Rudin, Mary Ellen Hereditary normality and Souslin lines. **(80b:03071)**
Countable product spaces *See* **Family of countable product spaces, (80e:54002)**
Family of countable product spaces ★The family of countable product spaces. (Japanese) **(80e:54002)**
Kyoto *See* **Family of countable product spaces, (80e:54002)**
Symposium:
Family of Countable Product Spaces *See* **Family of countable product spaces, (80e:54002)**

54B15 Quotient spaces, decompositions

Bankston, Paul (*with* McGovern, Richard J.) Topological partitions. **80i:54007**
McGovern, Richard J. *See* **Bankston, Paul, 80i:54007**
Nadler, Sam B., Jr. A fixed point theorem for hyperspace suspensions. **80d:54006**

Secondary classifications:

Daverman, Robert J. A nonshrinkable decomposition of S^n determined by a null sequence of cellular sets. **(80j:57015)**
Liu, Ying Ming *See* **Pu, Bao Ming, (80e:54006)**
Mitchell, W. J. R. Absolute suspensions and cones. **(80g:57017)**
Pu, Bao Ming (*with* Liu, Ying Ming) Product and quotient spaces in fuzzy topology. (Chinese) **(80e:54006)**
Rajagopalan, M. Scattered spaces. III. **(80c:54044)**
Warrack, B. (*with* Willard, S.) Domains of first countability. (Serbo-Croatian summary) **(80g:54014)**
Willard, S. *See* **Warrack, B., (80g:54014)**

54B17 Adjunction spaces and similar constructions

Bentley, H. L. (*with* Herrlich, Horst) Completion as reflection. **80h:54008**
Herrlich, Horst *See* **Bentley, H. L., 80h:54008**
Liu, Li Yu *See* **Liu, Ying Ming, 80i:54008**
Liu, Ying Ming (*with* Liu, Li Yu) Metrization of adjunction spaces. (Chinese) **80i:54008**

54B20 Hyperspaces

Aumann, Georg Der abbildungstheoretische Zugang zur Topologie. **80a:54008**
Bennett, H. R. Pixley-Roy spaces and Heath planes. **80k:54009**
Borwein, Jonathan M. Monochrome lines in the plane. **80h:54009**
Curtis, D. W. Triangulable hyperspace pairs. **80j:54004**
(*with* Schori, R. M.) Hyperspaces of Peano continua are Hilbert cubes. **80k:54010**
Growth hyperspaces of Peano continua. **80a:54009**
Hyperspaces homeomorphic to Hilbert space. **80d:54007**
Eberhart, Carl (*with* Nadler, Sam B., Jr.) Hyperspaces of cones and fans. **80i:54009**
Feichtinger, Oskar Hyperspaces with the kappa topology. **80k:54011**
Halmov, Ja. N. The homotopy type of a space having a brick decomposition. (Russian. Tajiki summary) **80m:54011**
Kubo, Mototsugu A note on hyperspaces by compact sets. (Japanese summary) **80h:54008**
Lau, August Y. W. (*with* Voas, C. H.) Connectedness of the hyperspace of closed connected subsets. **80h:54009**
Linžuk, R. S. Spectral representation of λ-hyperspaces. (Russian. English summary) **80g:54008**
Lutzer, David J. Pixley-Roy topology. **80m:54012**

Nadler, Sam B., Jr. *See* **Eberhart, Carl, 80f:54009**
Okuyama, Akihiro Note on hyperspaces consisting of compact sets. **80k:54012**
Pavlovskiĭ, D. S. Spaces of open sets and spaces of continuous functions. (Russian) **80k:54013**
Petrus, Ann Contractibility of Whitney continua in $C(X)$. **80a:54010**
Schori, R. M. *See* **Curtis, D. W., 80k:54010**
Voas, C. H. *See* **Lau, August Y. W., 80k:54009**
Ward, L. E., Jr. A cyclic connectivity theorem for hyperspaces. **80f:54010**

Secondary classifications:

Flachsmeyer, Jürgen On the Busemann metrization of the hyperspace. **(80f:51022)**
Grispolakis, Joachim N. (*with* Tymchatyn, Edward D.) Embedding smooth dendroids in hyperspaces. **(80j:54028)**
(*with* Nadler, Sam B., Jr.; Tymchatyn, Edward D.) Some properties of hyperspaces with applications to continua theory. **(80j:54029)**
(*with* Tymchatyn, Edward D.) Weakly confluent mappings and the covering property of hyperspaces. **(80d:54041)**
Lee, Cheng-Ming An existence theorem via an intuitive idea and fixed-point theorems. **(80b:54061)**
McAllister, Byron L. Hyperspaces and multifunctions, the first half century (1900–1950). **(80g:54001)**
van Mill, Jan Not every K_1-embedded subspace is K_0-embedded. **(80j:54012)**
Mizokami, Takesi On submetrizability and G_δ-diagonals. **(80j:54023)**
Nadler, Sam B., Jr. *See* **Grispolakis, Joachim N.; et al., (80j:54029)**
Rogers, James T., Jr. Weakly confluent mappings and finitely-generated cohomology. **(80m:54048)**
Tymchatyn, Edward D. *See* **Grispolakis, Joachim N., (80d:54041); Grispolakis, Joachim N., (80j:54028)** *and* **Grispolakis, Joachim N.; et al., (80j:54029)**

54B25 Sums, inverse limits

Schneider, Victor P. A universal property of the Whyburn construction. (Russian summary) **80m:54013**
Stone, A. H. Inverse limits of compact spaces. **80m:54014**

Secondary classifications:

Borges, Carlos R. Direct sums of stratifiable spaces. **(80f:54038)**
Heisey, Richard E. An example on normal covers. **(80k:54033)**
Parker, G. Edgar Semigroups of continuous transformations and generating inverse limit sequences. **(80h:54048)**
Schröder, Johann Das Wallman-Verfahren und inverse Limites. (English summary) **(80a:54043)**

54B30 Categorical methods [See also 18B30.]

Heldermann, N. C. Hausdorff nearness spaces. **80k:54014**
Lüschow, Rainer Bodo Categories of statistic-metric spaces (a co-universal construction). **80f:54011**
Salicrup López, Graciela (*with* Vázquez, R.) Connection and disconnection. **80m:54015**
Semadeni, Zbigniew (*with* Zidenberg-Spirydonow, H.) Functors on categories of ordered topological spaces. **80m:54016**
Vázquez, R. *See* **Salicrup López, Graciela, 80m:54015**
Zidenberg-Spirydonow, H. *See* **Semadeni, Zbigniew, 80m:54016**

Secondary classifications:

Ahmad, Naeem Exact sequences of topological spaces. **(80c:54008)**
Banaschewski, B. Recovering a space from its Banach sheaves. **(80m:18004)**
Brümmer, G. C. L. Two procedures in bitopology. **(80k:54055)**
Brunet, Bernard Sur la classe des morphismes propres dans la catégorie des espaces de convergence. **(80g:54004)**
Frič, Roman (*with* Kent, D. C.) On the natural completion functor for Cauchy spaces. **(80a:54011)**
Giuli, Eraldo Final topologies and coreflexivity. (Italian. English summary) **(80m:18002)**
Herrlich, Horst Initial and final completions. **(80j:18015)**
(*with* Salicrup López, Graciela; Vázquez, R.) Dispersed factorization structures. **(80j:18006)**
See also **Categorical topology, (80f:18002)**
Hušek, Miroslav Products of uniform spaces. **(80m:54039)**
Johnstone, P. T. On a topological topos. **(80f:18010)**
Kent, D. C. *See* **Frič, Roman, (80a:54011)**
Lambek, J. (*with* Rattray, B. A.) A general Stone-Gel'fand duality. **(80f:18012)**
Mrowka, Hasan *n*-absolutes of regular spaces. (Russian) **(80g:54042)**
Mulvey, Christopher J. Banach spaces over a compact space. **(80m:18005)**
(Preuss, Gerhard) *See* **Categorical topology, (80f:18002)**
Rattray, B. A. *See* **Lambek, J., (80f:18012)**
Reynolds, George D. (*with* Rice, Michael D.) Completeness and covering properties of uniform spaces. **(80f:54035)**
Rice, Michael D. *See* **Reynolds, George D., (80f:54035)**
Salicrup López, Graciela *See* **Herrlich, Horst; et al., (80j:18006)**
Tholen, Walter Semitopological functors. I. **(80k:18012a)**
(*with* Wischnewsky, Manfred B.) Semitopological functors. II. External characterizations. **(80k:18012b)**
Vázquez, R. *See* **Herrlich, Horst; et al., (80j:18006)**
Wischnewsky, Manfred B. *See* **Tholen, Walter, (80k:18012b)**
Berlin *See* **Categorical topology, (80f:18002)**
Categorical topology ★Categorical topology. **(80f:18002)**
Conference:
Categorical Topology *See* **Categorical topology, (80f:18002)**
Topology *See* **Categorical topology, (80f:18002)**

54B35 Spectra

Kozlovskiĭ, I. M. Absolute polyhedral expansions of metric spaces. (Russian) **80k:54012**

Secondary classifications:

Fedorčuk, V. V. Fully closed maps, scannable spectra and cardinality of hereditarily separable spaces. **(80k:54005)**
Haimov, Ja. N. Locally open r-spectra. (Russian. Tajiki summary) **(80f:54007)**
Liničuk, R. S. Spectral representation of λ-hyperspaces. (Russian. English summary) **(80g:54008)**

54B40 Presheaves and sheaves [See also 18F20.]

54B99 None of the above, but in this section

Frič, Roman (*with* Kent, D. C.) On the natural completion functor for Cauchy spaces. **80a:54011**
Kent, D. C. *See* **Frič, Roman, 80a:54011**
Mukherjee, T. K. (*with* Sarkar, H. S.; Sarkar, Mira) On sum theorems. **80d:54008**
Murdeshwar, M. G. Alexander's subbasis theorem. **80e:54009**
Sarkar, H. S. *See* **Mukherjee, T. K.; et al., 80d:54008**
Sarkar, Mira *See* **Mukherjee, T. K.; et al., 80d:54008**

54Cxx Maps and general types of spaces defined by maps

Secondary classifications:

Byrne, Charles L. Remarks on the set-valued integrals of Debreu and Aumann. **(80a:28006)**

54C05 Continuous maps

Chudnovsky, David V. Sequentially continuous mappings of product spaces. **80m:54017**
Fornaess, John Erik (*with* Krantz, Steven George) Continuously varying peaking functions. **80m:54018**
Gauld, David B. c-continuous functions and cocompact topologies. **80k:54015**
Giuli, Eraldo (*with* Tognoli, Alberto) Topological property and initial topologies. (Italian. English summary) **80m:54019**
Gregorius, Hans-Rolf (*with* Ziehe, Martin) Iterations of continuous mappings on metric spaces. Asymptotic stability and Lyapunov functions. **80h:54010**
Krantz, Steven George *See* **Fornaess, John Erik, 80m:54018**
Kulpa, W. Some factorization theorems for closed subspaces. **80k:54016**
Magill, K. D., Jr. Semigroups of continuous selfmaps for which Green's $\mathcal{R}$ and $\mathcal{J}$ relations coincide. **80e:54010**
Meyer, Gerard G. L. (*with* Raup, R. C.) On the structure of cluster point sets of iteratively generated sequences. **80h:54011**
Mirzojan, M. M. On limit sets of mappings of topological spaces. (Russian) **80f:54005**
Mysior, Adam A remark on Gehér's theorem. **80a:54012**
Neubrunn, Tibor Generalized continuity and separate continuity. (Russian summary) **80k:54017**
Raup, R. C. *See* **Meyer, Gerard G. L., 80h:54011**
Rose, David Alon On Levine's decomposition of continuity. **80g:54009**
Šalát, Tibor On nowhere density of the class of somewhat continuous functions in $M(X)$. **80h:54012**
Talagrand, Michel Deux généralisations d'un théorème de I. Namioka. **80k:54018**
Tognoli, Alberto *See* **Giuli, Eraldo, 80m:54019**
Ziehe, Martin *See* **Gregorius, Hans-Rolf, 80h:54010**

Secondary classifications:

Bellamy, David P. (*with* Hagopian, Charles L.) Mapping continua onto their cones. **(80m:54047)**
Forti, Gian Luigi Regularity and representation theorems for a class of translation equation's solutions. (Italian summary) **(80m:39007)**
Hagopian, Charles L. *See* **Bellamy, David P., (80m:54047)**
Jeschek, Franz Compactness in function spaces with a locally uniform range. **(80a:54018)**
Ščepin, E. V. Sur les applications continues des cubes de Tihonov. (English summary) **(80b:54007)**

54C08 Connectivity maps, semicontinuous maps, etc.

Behringer, Fred Alois Zur Existenz maximaler Werte bei quasiordnungswertigen Abbildungen. (English and French summaries) **80m:54020**
Brandt, I. S. Semicontinuity of some functions that are connected with a multivalued map. (Russian) **80f:54006**
Prakash, Anand (*with* Srivastava, Pramila) Somewhat continuity and some other generalisations of continuity. **80k:54019**
Srivastava, Pramila *See* **Prakash, Anand, 80k:54019**

Secondary classifications:

Dolecki, Szymon (*with* Rolewicz, Stefan) Metric characterizations of upper semicontinuity. **(80f:49010)**
Lin, Shwu Yeng T. (*with* Lin, You Feng) On almost continuous mappings and Baire spaces. **(80g:54020)**
Lin, You Feng *See* **Lin, Shwu Yeng T., (80g:54020)**
Nermuth, Manfred Minimal conditions for upper-hemicontinuity of the choice correspondence. **(80g:90008)**
Rolewicz, Stefan *See* **Dolecki, Szymon, (80f:49010)**

54C10 Special maps: open, closed, perfect, almost open, light, etc.

Boone, James R. On open mappings, closed mappings, and ordinal invariants. **80h:54013**
Pseudo-open functions are monotonic decreasing for ordinal and cardinal invariants. **80k:54020**
Brunner, N. Lokalsurjektive Funktionen. **80m:54021**
Calbrix, Jean (*with* Troallic, Jean-Pierre) Applications séparément continues. (English summary) **80c:54009**
Čigogidze, A. Č. The contractions of topological spaces. (Russian. English and Georgian summaries) **80g:54010**
Ford, Jo (*with* Rogers, J. W., Jr.) Refinable maps. **80d:54009**
Grace, E. E. Refinable maps on graphs are near homeomorphisms. **80m:54022**
Grispolakis, Joachim N. Confluent and related mappings defined by means of quasi-components. **80b:54010**
On a problem of Lelek concerning open mappings. **80c:54010**
Guerraggio, A. (*with* Paganoni, Luigi) On a class of convex functions. (Italian. English summary) **80l:54013**
Herrington, Larry L. *See* **Long, Paul E., 80g:54011**
Herrmann, Robert A. Convergence spaces and perfect maps. **80e:54011**
Hughes, C. Bruce Some remarks on freely decomposable mappings. **80j:54005**
Hyb, Wojciech On some minimal transformations of compact spaces. **80a:54013**
Ikeda, Yoshito RC-mappings and almost normal spaces. **80k:54021**
Klebanov, B. S. Closed images of products of metric spaces. (Russian) **80k:54022**
Long, Paul E. (*with* Herrington, Larry L.) Basic properties of regular-closed functions. **80g:54011**
Martin, Joseph (*with* Rosenholtz, Ira) An elementary solution of the monotone mapping problem. **80a:54014**
Mikin, V. V. Regular sets and closed maps of nonmetrizable spaces. (Russian) **80c:54011**
Nepomnjaščiĭ, G. M. Multiplicative extension operators. (Russian) **80j:54006**
Noiri, Takashi On δ-perfect functions. (Italian summary) **80g:54012**
On functions with strongly closed graphs. **80a:54015**
Ornocadze, R. N. Behavior of some classes of spaces and the dimension under continuous mappings. (Russian. Georgian and English summaries) **80l:54014**
c-scattered and scattered mappings. (Russian. English and Georgian summaries) **80m:54023**
Paganoni, Luigi *See* **Guerraggio, A., 80l:54013**
Pavlovskiĭ, D. S. Absolutes of continuous mappings. (Russian. English summary) **80i:54015**
Rogers, J. W., Jr. *See* **Ford, Jo, 80d:54009**
Rosenholtz, Ira *See* **Martin, Joseph, 80a:54014**
Šamgunov, N. K. On perfect images of feathered spaces. (Russian) **80g:54013**
Troallic, Jean-Pierre *See* **Calbrix, Jean, 80c:54009**
Utz, W. R. Expansive mappings. **80k:54023**
Warrack, B. (*with* Willard, S.) Domains of first countability. (Serbo-Croatian summary) **80g:54014**
Willard, S. *See* **Warrack, B., 80g:54014**

Secondary classifications:

Church, P. T. Discrete maps on manifolds. **(80g:57014)**
Dalla Vedova, Elvira Tognoli A theorem on coverings. (Italian. English summary) **(80m:54041)**
DeGeorge, David L. (*with* Reddy, William L.) A Hopf inequality for branch sets. **(80a:57002)**
Fedorčuk, V. V. Fully closed maps, scannable spectra and cardinality of hereditarily separable spaces. **(80k:54005)**
Forti, Gian Luigi Regularity and representation theorems for a class of translation equation's solutions. (Italian summary) **(80m:39007)**
Gates, Catherine L. On coabsolute paracompact spaces. **(80i:54024)**
Gordh, G. R., Jr. (*with* Lum, Lewis) Radially convex mappings and smoothness in continua. **(80e:54044)**
(*with* Hughes, C. Bruce) On freely decomposable mappings of continua. (Serbo-Croatian summary) **(80k:54059)**
Grace, E. E. (*with* Vought, Eldon J.) Semi-confluent and weakly confluent images of tree-like and atriodic continua. **(80c:54032)**
Grispolakis, Joachim N. (*with* Nadler, Sam B., Jr.; Tymchatyn, Edward D.) Some properties of hyperspaces with applications to continua theory. **(80j:54029)**
Gruenhage, Gary On closed images of orthocompact spaces. **(80i:54025)**
Hdeib, H. Z. *See* **Pareek, C. M., (80d:54024)**
Herrmann, Robert A. The productivity of generalized perfect maps. **(80d:54062)**
Hughes, C. Bruce *See* **Gordh, G. R., Jr., (80k:54059)**
Kulpa, W. Some factorization theorems for closed subspaces. **(80k:54016)**
Lau, August Y. W. Certain local homeomorphisms of continua are homeomorphisms. (Russian summary) **(80a:54058)**
Lum, Lewis *See* **Gordh, G. R., Jr., (80e:54044)**
van Mill, Jan (*with* van de Vel, M.) Convexity preserving mappings in subbase convexity theory. **(80f:52014)**
Mizokami, Takemi On submetrizability and G_δ-diagonals. **(80j:54023)**
Nadler, Sam B., Jr. The metric confluent images of half-lines and lines. **(80i:54040)**
See also **Grispolakis, Joachim N.; et al., (80j:54029)**
Nepomnjaščiĭ, G. M. (*with* Smirnov, Ju. M.) Retraction of mappings. (Russian) **(80h:54014)**
Equivalence of some properties of continuous mappings. (Russian) **(80k:54016)**
Noiri, Takashi Almost-closed images of countably paracompact spaces. **(80c:54017)**
Pareek, C. M. (*with* Hdeib, H. Z.) A note on $[a, b]$-compact spaces. **(80d:54024)**
Reddy, William L. *See* **DeGeorge, David L., (80a:57002)**
Segal, Jack Refinable maps on 2-manifolds. **(80m:57001)**
Smirnov, Ju. M. *See* **Nepomnjaščiĭ, G. M., (80h:54014)**
Tymchatyn, Edward D. *See* **Grispolakis, Joachim N.; et al., (80j:54029)**
van de Vel, M. *See* **van Mill, Jan, (80f:52014)**
Vought, Eldon J. *See* **Grace, E. E., (80c:54032)**
Walsh, John J. Isotoping mappings to open mappings. **(80m:57008)**
Wattel, E. Normally supercompact spaces and convexity preserving maps. **(80i:54028)**
Zelins'kiĭ, Ju. B. Application of a local degree to the study of quasi-interior mappings. (Russian) **(80b:58011)**

54C15 Retraction

Boxer, Laurence Retraction spaces and the homotopy metric. **80k:54024**
van Mill, Jan Extenders from $\beta X - X$ to βX. (Russian summary) **80g:54015**
Nepomnjaščiĭ, G. M. (*with* Smirnov, Ju. M.) Retraction of mappings. (Russian) **80h:54014**
Smirnov, Ju. M. *See* **Nepomnjaščiĭ, G. M., 80h:54014**
Steinlein, H. On two results of J. Dugundji about extensions of maps and retractions. **80g:54016**

Secondary classifications:

Duffus, Dwight (*with* Rival, Ivan) Retracts of partially ordered sets. **(80j:06003)**
Maćkowiak, Tadeusz Monotone retracts of an arcwise connected continuum. **(80k:54045)**
Rival, Ivan *See* **Duffus, Dwight, (80j:06003)**
Singh, Sukhjit On a problem of Borsuk. (Russian summary) **(80i:55011)**

54C20 Extension

Banilower, H. Isomorphisms and simultaneous extensions in $C(S)$. **80k:54015**
Błaszczyk, A. (*with* Lorek, U.) A classification of H-closed extensions. **80a:54016**
Haimov, Ja. N. Locally open r-spectra. (Russian. Tajiki summary) **80f:54007**
Lisica, Ju. T. Obstructions to the extension of mappings. (Russian) **80g:54017**
Lorek, U. *See* **Błaszczyk, A., 80a:54016**
van Mill, Jan (*with* Schrijver, Alexander) Superextensions which are Hilbert cubes. **80d:54010**
Nepomnjaščiĭ, G. M. Equivalence of some properties of continuous mappings. (Russian) **80k:54016**
Pták, P. On extensions of uniformly continuous Banach-space-valued mappings. **80b:54011**
Schrijver, Alexander *See* **van Mill, Jan, 80d:54010**
Sennott, L. I. A necessary condition for a Dugundji extension property. **80k:54025**
Zaharov, V. K. Construction of all locally compact and all locally compact paracompact extensions. (Russian) **80b:54012**

Secondary classifications:

Čigogidze, A. Č. On bicompact extensions of Tychonoff spaces. **(80k:54038)**
Helsey, Richard E. An example on normal covers. **(80k:54033)**
Lewis, Wayne Stable homeomorphisms of the pseudo-arc. **(80m:54053)**
Nepomnjaščiĭ, G. M. Multiplicative extension operators. (Russian) **(80j:54006)**
Schneider, Victor P. A universal property of the Whyburn construction. (Russian summary) **(80m:54013)**
Suszycki, Alfred On extensions of multivalued maps. (Russian summary) **(80i:54019)**

54C25 Imbedding

Ford, Jo (*with* Heath, R. W.) Incompressible spaces. **80i:54016**
Heath, R. W. *See* **Ford, Jo, 80i:54016**
Ishii, Tadashi (*with* Ohta, Haruto) Generalizations of C-embedding and their applications. **80e:54012**
Ivanov, A. V. The imbedding of countable derivatives of separable metric spaces into weakly infinite-dimensional compacta. (Russian) **80b:54013**
Ohta, Haruto *See* **Ishii, Tadashi, 80e:54012**
Swardson, Mary Anne A short proof of Kowalsky's hedgehog theorem. **80b:54014**
Uspenskiĭ, V. V. Imbeddings into function spaces. (Russian) **80b:54015**

Secondary classifications:

Banilower, H. Isomorphisms and simultaneous extensions in $C(S)$. **(80k:54015)**
Čigogidze, A. Č. On bicompact extensions of Tychonoff spaces. **(80k:54038)**
Filippov, V. V. (*with* Úry, L.) A theorem on relative universal spaces with given weight and dimension. **(80h:54042)**
Grispolakis, Joachim N. (*with* Tymchatyn, Edward D.) A universal smooth dendroid. (Russian summary) **(80c:54040)**
(*with* Tymchatyn, Edward D.) Embedding smooth dendroids in hyperspaces. **(80j:54028)**
van Mill, Jan (*with* Wattel, E.) An external characterization of spaces which admit binary normal subbases. **(80a:54029)**
Nogura, Tsugunori The subsequentiality of product spaces. **(80g:54007)**
Oversteegen, Lex G. Fans and embeddings in the plane. **(80m:54052)**
Sennott, L. I. A necessary condition for a Dugundji extension property. **(80k:54025)**
Some remarks on M-embedding. **(80k:54049)**
Tymchatyn, Edward D. *See* **Grispolakis, Joachim N., (80c:54040)** *and* **Grispolakis, Joachim N., (80j:54028)**
Úry, L. *See* **Filippov, V. V., (80h:54042)**
Wattel, E. *See* **van Mill, Jan, (80a:54029)**

54C30 Real-valued functions [See also 26–XX.]

Blasco Olcina, José Luis Two problems on k_R-spaces. **80a:54017**
Buttazzo, Giuseppe (*with* Dal Maso, Gianni) Γ-limit of a sequence of nonconvex and non-equi-Lipschitz integral functionals. **80k:54026**

Dal Maso, Gianni *See* Buttazzo, Giuseppe, 80h:54026
Gerlits, J. Remarks on discrete convergence. 80m:54024
Grande, Zbigniew Une propriété des fonctions réelles. 80j:54007
Kosszela, B. (*with* Świątkowski, T.; Wilczyński, Władysław) Classes of continuous real functions. 80g:54018
Namioka, Isaac (*with* Saeki, Sadahiro) On lattice isomorphisms of $C(X)^+$. 80d:54011
Nenas, Helena Stronger topologies preserving the class of continuous functions. 80e:54013
Saeki, Sadahiro *See* Namioka, Isaac, 80d:54011
Šapiro, L. B. On the space of probability measures. (Russian) 80l:54017
Świątkowski, T. *See* Kosszela, B.; et al., 80g:54018
White, H. E., Jr. Topological spaces in which Blumberg's theorem holds. II. 80m:54025
Wilczyński, Władysław *See* Kosszela, B.; et al., 80g:54018

Secondary classifications:

Brown, A. L. Chebyshev subspaces of finite codimension in spaces of continuous functions. (80e:41016)
Frič, Roman (*with* Koutník, Václav) Sequentially complete spaces. (80l:54032)
Gluli, Ezaldo A Stone-Weierstrass theorem for sheaves. (Italian. English summary) (80k:54031)
Isaka, Teiji Notes on regular, R-invariant expansions of topologies. (Japanese summary) (80k:54002)
Joseph, James E. A note on pseudocompact spaces. (80g:54030)
Pseudocompactness and closed subsets of products. (80f:54015)
Koutník, Václav *See* Frič, Roman, (80l:54032)
Le Donne, Attilio On prime ideals of $C(X)$. (80k:54027)
Nepomnjaščiĭ, G. M. Multiplicative extension operators. (Russian) (80j:54006)
Šalát, Tibor On nowhere density of the class of somewhat continuous functions in $M(X)$. (80k:54012)

54C35 Function spaces [See also 58D15.]

Dal Maso, Gianni Convergence faible de fonctions croissantes sur un ensemble ordonné. (Italian summary) 80e:54014
Habre, William *See* Noureddine, Khalil, 80e:54015
Hmyleva, T. E. Classification of spaces of continuous functions on segments of ordinals. (Russian) 80f:54008
Irudayanathan, Anthony Cover-close topologies for function spaces. 80h:54017
Jeschek, Franz Compactness in function spaces with a locally uniform range. 80a:54018
McCoy, R. A. Characterization of pseudocompactness by the topology of uniform convergence on function spaces. 80a:54019
Noureddine, Khalil (*with* Habre, William) Topologies P-strictes. (English summary) 80e:54015
Predoi, Maria Sur la convergence quasi-uniforme. 80a:54020
Troallic, Jean-Pierre Fonctions à valeurs dans des espaces fonctionnels généraux: théorèmes de R. Ellis et de I. Namioka. (English summary) 80d:54012
Večtomov, E. M. An isomorphism of the multiplicative semigroups of algebras of continuous functions with compact support. (Russian) 80d:54013

Secondary classifications:

Govaerts, W. Bornological spaces of non-Archimedean valued functions with the compact-open topology. (80j:46115)
Hansen, Vagn Lundsgaard The homotopy type of the space of maps of a homology 3-sphere into the 2-sphere. (80k:58032)
Haver, William E. A near-selection theorem. (80e:54015)
McCann, Roger C. Dynamical systems whose orbit spaces are nearly Hausdorff. (80g:54048)
Pavlovskiĭ, D. S. Spaces of open sets and spaces of continuous functions. (Russian) (80k:54013)
Schroder, M. Order-bounded convergence structures on spaces of continuous functions. (80l:46022)
Sennott, L. I. A necessary condition for a Dugundji extension property. (80k:54025)

54C40 $C(X)$; algebraic techniques (ideals, etc.) [See also 46J10.]

Koldunov, A. V. *See* Veksler, A. I., 80g:54019
Le Donne, Attilio On prime ideals of $C(X)$. 80k:54027
Lutzer, David J. (*with* Przymusiński, Teodor C.) Continuous extenders in normal and collectionwise normal spaces. 80d:54014
Maharam, Dorothy (*with* Stone, A. H.) Realizing isomorphisms of category algebras. 80m:54021
Mulvey, Christopher J. Compact ringed spaces. 80b:54016
Przymusiński, Teodor C. *See* Lutzer, David J., 80d:54014
Robertson, A. Guyan Averages of extreme points in complex function spaces. 80h:54018
Stone, A. H. *See* Maharam, Dorothy, 80a:54021
Veksler, A. I. (*with* Koldunov, A. V.) Sequential majorizability in vector lattices. (Russian) 80g:54019

Secondary classifications:

Anderson, Marlow The essential closure of $C(X)$. (80g:06019)
van Casteren, Jan A. Strictly positive functionals on vector lattices. (80j:46014)
Fisher, Stephen D. The decomposition of $C_c(K)$ into the direct sum of subalgebras. (80h:46060)
Govaerts, W. Bornological spaces of non-Archimedean valued functions with the point-open topology. (80g:46063)
Morse, William The global dimension of $C(X)$. (80e:46042)
Poi, Roman A function space $C(X)$ which is weakly Lindelöf but not weakly compactly generated. (80j:46042)

54C45 C- and C^*-imbedding

Anil, Charles E. Absolute C^*-embedding of P-spaces. (Russian summary) 80a:54022
Dashiell, F. K., Jr. Erratum to "A theorem on C^*-embedding" (Proc. Amer. Math. Soc. 69 (1978), no. 2, 359–360). 80e:54016

Secondary classifications:

Le Donne, Attilio On prime ideals of $C(X)$. (80k:54027)
Robertson, A. Guyan Averages of extreme points in complex function spaces. (80h:54018)

54C50 Zero sets, Baire sets and functions [See also 26A21.]

Bourgain, Jean (*with* Fremlin, David H.; Talagrand, Michel) Pointwise compact sets of Baire-measurable functions. 80b:54017
Some remarks on compact sets of first Baire class. 80j:54008
Fleissner, William G. (*with* Kunen, Kenneth) Barely Baire spaces. 80f:54009
Fremlin, David H. *See* Bourgain, Jean; et al., 80b:54017
Kunen, Kenneth *See* Fleissner, William G., 80f:54009
Lin, Shwu Yeng T. (*with* Lin, You Feng) On almost continuous mappings and Baire spaces. 80g:54020
Lin, You Feng *See* Lin, Shwu Yeng T., 80g:54020
Neubrunn, Tibor Erratum: "A note on mappings of Baire spaces" (Math. Slovaca 27 (1977), no. 2, 173–176). 80e:54017
Sander, Wolfgang A generalization of a theorem of S. Piccard. 80f:54010
Talagrand, Michel *See* Bourgain, Jean; et al., 80b:54017
Tsurumi, K. On spaces of Baire functions over nonarchimedean valued fields. 80e:54012
Tucker, C. T. Representation of Baire functions as continuous functions. 80b:54018

Secondary classifications:

Curzer, Howard (*with* Hager, Anthony W.) Zero-set ultrafilters and G_δ-closures in uniform spaces. (80m:54038)
Deulbes, Ali Caractérisation des mesures qui intègrent toutes les fonctions réelles mesurables. (80j:28021)
Fleischer, Isidore On: "Subcompactness and the Baire category theorem" [Indag. Math. 25 (1963), 761–767; MR 28 #2520] by J. de Groot. (80g:54029)
(de Groot, Johannes) *See* Fleischer, Isidore, (80g:54029)
Guerraggio, A. (*with* Paganoni, Luigi) On a class of convex functions. (Italian. English summary) (80l:54013)
Hager, Anthony W. Semicompact cozero-fields and uniform spaces. (80d:54033)
See also Curzer, Howard, (80m:54038)
Hegde, Shankar A characterization of Z-separating algebras. (80e:46035)
Maharam, Dorothy Realizing automorphisms of category algebras of product spaces. (80d:54005)
(*with* Stone, A. H.) Borel boxes. (80k:54007)
Paganoni, Luigi *See* Guerraggio, A., (80l:54013)
Rice, Michael D. Uniformities in the descriptive theory of sets. II. Measurable functions. (80g:54043)
Stone, A. H. *See* Maharam, Dorothy, (80k:54007)

54C55 Absolute neighborhood extensor, absolute extensor, absolute neighborhood retract (ANR), absolute retract spaces (general properties) [See also 54F40, 55M15.]

Haimov, Ja. N. A growing sequence of retracts. (Russian. Tajiki summary) 80k:54019
Michael, E. Uniform ARs and ANRs. 80m:54026
Nguyen To Nhu The gluing theorem for uniform neighbourhood retracts. (Russian summary) 80j:54009
Patten, Paul R. Locally connected generalized absolute neighborhood retracts. 80m:54027
Przymusiński, Teodor C. Collectionwise normality and absolute retracts. 80g:54021a
Collectionwise normality and extensions of continuous functions. 80g:54021b
Sher, R. B. Products and sums of absolute proper retracts. II. 80k:54028
Singh, Sukhjit A linking axiom and retracts. (Russian summary) 80g:54022
Živanovič, Žarko Quasi-extendable mappings. (Russian) 80e:54018

Secondary classifications:

Čerin, Zvonko $\mathcal{C}_p$-movable at infinity spaces, compact ANR divisors and property UVW^n. (80c:54013)
Haimov, Ja. N. The homotopy type of a space having a brick decomposition. (Russian. Tajiki summary) (80m:54011)
Haver, William E. A near-selection theorem. (80e:54015)
Hoffmann, Burkhard An injective characterization of Peano spaces. (80m:54049)
Husch, Lawrence S. Intersections of ANR's. (80m:55014)
Nepomnjaščiĭ, G. M. (*with* Smirnov, Ju. M.) Retraction of mappings. (Russian) (80h:54014)
Equivalence of some properties of continuous mappings. (Russian) (80h:54016)
Sakai, Katsuro Some properties of MAR and MANR. (80e:55018)
Smirnov, Ju. M. *See* Nepomnjaščiĭ, G. M., (80h:54014)
Suszycki, Alfred On extensions of multivalued maps. (Russian summary) (80l:54019)

54C56 Shape theory [See mainly 55P55, 57N25.]

Dydak, Jerzy (*with* Segal, Jack) ★Shape theory. 80h:54020
Kodama, Yukihiro A characteristic property of a finite-dimensional pointed FANR. 80h:54021
Koyama, Akira Note on quasi-domination in the sense of K. Borsuk. 80b:54019
Krasnosel'skiĭ, M. A. (*with* Opoĭcev, V. I.) A global homeomorphism theorem. (Russian) 80g:54023

Mardešić, Sibe (*with* Rushing, T. B.) n-shape fibrations. **80m:54028**
Opoicev, V. I. *See* Krasnosel'skiĭ, M. A., **80g:54023**
Rubanov, I. S. Characterization of shapes of compacta with the aid of spectra of nerves of coverings. (Russian) **80g:54024**
Rushing, T. B. *See* Mardešić, Sibe, **80m:54028**
Segal, Jack An introduction to shape theory. **80e:54014**
See also Dydak, Jerzy, **80h:54020**
Watanabe, Tadashi On spaces which have the shape of compact metric spaces. **80f:54018**

Secondary classifications:

Čerin, Zvonko Homotopy properties of locally compact spaces at infinity—triviality and movability. (Serbo-Croatian summary) **80g:55020**
Dydak, Jerzy The Whitehead and the Smale theorems in shape theory. **80h:55008**
MacDonald, John L. Categorical shape theory and the back and forth property. **80j:55013**
Mardešić, Sibe (*with* Rushing, T. B.) Shape fibrations. I. **80f:55013a**
(*with* Rushing, T. B.) Shape fibrations. II. **80f:55013b**
Rushing, T. B. *See* Mardešić, Sibe, **80f:55013a** *and* Mardešić, Sibe, **80f:55013b**
Singh, Sukhjit On a problem of Borsuk. (Russian summary) **80i:55011**
Skardev, G. S. The shape of compact, connected and finite-dimensional groups. (Russian) **80k:55038**
Szuzycki, Alfred On extensions of multivalued maps. (Russian summary) **80i:54019**
Wattenberg, Frank Nonstandard analysis and the theory of shape. **80e:54057**

54C60 Set-valued maps [See also 26E25, 28B20.]

Dugundji, J. (*with* Granas, Andrzej) KKM maps and variational inequalities. **80d:54015**
Granas, Andrzej *See* Dugundji, J., **80d:54015**
Joseph, James E. Multifunctions and cluster sets. **80f:54011**
Kowalski, Paweł *See* Sobieszek, Wiesław, **80j:54010**
Lechicki, A. On bounded and subcontinuous multifunctions. **80a:54023**
Popa, Valeriu On certain properties of quasicontinuous and almost continuous multifunctions. (Romanian. French summary) **80b:54020**
Saint-Pierre, J. Points exposés d'une multiapplication à valeurs convexes de $\mathbf{R}^n$. **80g:54025**
Sobieszek, Wiesław (*with* Kowalski, Paweł) On the different definitions of the lower semicontinuity, upper semicontinuity, upper semicompacity, closity and continuity of the point-to-set maps. **80j:54010**
Szuzycki, Alfred On extensions of multivalued maps. (Russian summary) **80i:54019**
Teodorescu, Veronica Théorèmes de sélection pour les applications multivoques lipschitziennes. **80b:54021**

Secondary classifications:

Achari, J. Generalized multivalued contractions and fixed points. **80g:54051**
Mušika, Roman Two fixed point theorems on contraction. (Russian summary) **80f:54043**
McAllister, Byron L. Hyperspaces and multifunctions, the first half century (1900–1950). **80g:54001**
Yanagi, Kenjiro A common fixed-point theorem for a sequence of multivalued mappings. **80e:54063**

54C65 Selections [See also 28B20.]

Čoban, M. M. General theorems on selections and their applications. (Russian) **80g:54026**
Eriov, M. P. Selectors in abstract space. (Russian) **80a:54024**
Haver, William E. A near-selection theorem. **80c:54015**
Jongmans, F. De la concentration vers la sélection par la dilatation. (English summary) **80h:54022**
Mackowiak, Tadeusz Continous selections for $C(X)$. (Russian summary) **80a:54025**
Srivastava, S. M. Selection theorems for G_δ-valued multifunctions. **80g:54027**
Tucci, Maria On a continuous selection problem for a multivalued mapping with n values that are not all distinct. (Italian. English summary) **80m:54029**

Secondary classifications:

Ioffe, Alexandre D. Single-valued representation of set-valued mappings. **(80e:28017)**
Mägeri, G. A unified approach to measurable and continuous selections. **(80d:28023)**

54C70 Entropy

Ahalaja, Š. I. Stochastic properties of continuous transformations of metric compacta. (Russian. Georgian and English summaries) **80h:54022**
Ledrappier, François A variational principle for the topological conditional entropy. **80j:54011**

Secondary classifications:

Coven, Ethan M. Topological entropy of block maps. **(80m:54055)**
Tagi-Zade, A. T. Entropy properties of operations of amenable groups. (Russian) **(80f:28026)**

54C99 None of the above, but in this section

Chakraborty, Shyama P. A note on schistic spaces. **80h:54023**
van Mill, Jan Not every K_1-embedded subspace is K_0-embedded. **80j:54012**

Secondary classifications:

Brunner, N. Lokalsurjektive Funktionen. **(80m:54021)**
Feichtinger, Oskar Hyperspaces with the kappa topology. **(80k:54011)**
Fornaess, John Erik (*with* Krantz, Steven George) Continuously varying peaking functions. **(80m:54018)**
Joseph, James E. Pseudocompactness and closed subsets of products. **(80f:54015)**
Krantz, Steven George *See* Fornaess, John Erik, **(80m:54018)**
Woodruff, David S. Compactifications and function algebras. (Italian summary) **(80c:54020)**

54Dxx Fairly general properties

Secondary classifications:

Sahidussi, Gert Uniforme Räume in der Graphentheorie. **(80m:05096)**

54D05 Connected and locally connected spaces (general aspects)

Abo-Zeid, E. On σ-connected spaces. **80d:54016**
Bridges, Douglas S. Connectivity properties of metric spaces. **80k:54024**
Foland, N. (*with* Nevin, B.; Pedersen, F.) When must a base for a locally connected space contain a base of connected sets? **80d:54017**
Grispolakis, Joachim N. (*with* Tymchatyn, Edward D.) σ-connectedness in hereditarily locally connected spaces. **80f:54012**
Maheshwari, S. N. (*with* Tapi, U.) Connectedness of a stronger type in topological spaces. **80j:54013**
Nevin, B. *See* Foland, N.; et al., **80d:54017**
Pedersen, F. *See* Foland, N.; et al., **80d:54017**
Simone, Joseph N. Continuous images of ordered compacta and hereditarily locally connected continua. **80g:54028**
Tapi, U. *See* Maheshwari, S. N., **80j:54013**
Tymchatyn, Edward D. *See* Grispolakis, Joachim N., **80f:54012**
Wang, Guo Jun A remark on the connectedness of sets of limit points of sequences. (Chinese) **80i:54020**

Secondary classifications:

Cvid, S. F. A countable strongly unicoherent space. (Russian) **80h:54045**
Dumitrescu, Camelia (*with* Vianu, Victor) The topological learning space. (Romanian. English summary) **80i:54060**
García-Máynez, A. On σ-unicoherence. **80k:54070**
Jones, F. Burton Wilder on connectedness. **(80f:01019b)**
Lau, August Y. W. (*with* Voas, C. H.) Connectedness of the hyperspace of closed connected subsets. **80h:54009**
Plastria, F. Connectedness and local connectedness of simple extensions. **80m:54003**
Simone, Joseph N. Concerning hereditarily locally connected continua. **80c:54037**
Valnio, Reino The locally connected and the uniformly locally connected coreflector in general convergence theory. **80j:19010**
Vianu, Victor *See* Dumitrescu, Camelia, **80i:54060**
Voas, C. H. *See* Lau, August Y. W., **80h:54009**
Ward, L. E., Jr. A cyclic connectivity theorem for hyperspaces. **80i:54010**
Wilder, R. L. Evolution of the topological concept of "connected". **(80f:01019a)**
See also Jones, F. Burton, **(80f:01019b)**

54D10 Separation axioms, $T_0 - T_3$

Cagliari, Francesca (*with* Cicchese, Marcello) Separation properties and compactification of non-T_0 topological spaces. (Italian. English summary) **80k:54029**
Cicchese, Marcello *See* Cagliari, Francesca, **80k:54029**
Dorsett, Charles Semi-T_2, semi-R_1, and semi-R_0 topological spaces. **80a:54026**
T_0-identification spaces and R_1 spaces. **80a:54027**
R_0 and R_1 topological spaces. **80e:54019**
Harley, P. W., III (*with* McNulty, G. F.) When is a point Borel? **80e:54020**
Hoffmann, Rudolf-E. On weak Hausdorff spaces. **80k:54030**
Juhász, I. (*with* Nagy, Zs.; Weiss, William) On countably compact, locally countable spaces. **80h:54025**
Kasahara, Shouro Operation-compact spaces. **80i:54021**
Maheshwari, S. N. (*with* Tapi, U.) On feebly R_0-spaces. **80a:54030**
McNulty, G. F. *See* Harley, P. W., III, **80e:54020**
Nagy, Zs. *See* Juhász, I.; et al., **80h:54025**
Tapi, U. *See* Maheshwari, S. N., **80m:54030**
Weiss, William *See* Juhász, I.; et al., **80h:54025**

Secondary classifications:

Berner, Andrew J. Generalizations of quasi-k spaces. **(80i:54031)**
Fox, Ralph (*with* Reilly, Ivan L.) Topological spaces and Abian structures. **(80c:54023)**
López Molina, J. A. (*with* López Pellicer, M.) On the existence of regular T^J topologies. (Spanish. English summary) **(80m:46013)**
López Pellicer, M. *See* López Molina, J. A., **(80m:46013)**
Maruy, Thomas On epireflective subcategories of topological categories. **(80g:18004)**
Mizokami, Takemi Metacompactness and subparacompactness of product spaces. **(80k:54026)**
Noglna, E. Ju. Enumerable topological spaces. (Russian) **(80e:03051)**
Reilly, Ivan L. *See* Fox, Ralph, **(80c:54023)**
Simone, Joseph N. Concerning hereditarily locally connected continua. **(80c:54037)**
Tedeschi, Giulio On a generalization of the separation axioms. (Italian. English summary) **(80a:54032)**

54D15 Higher separation axioms (completely regular, normal, perfectly or collectionwise normal, etc.)

Bell, Murray G. A normal first countable ccc nonseparable space. **80e:54021**
Čigogidze, A. Č. The Uryson-Menger inequality. (Russian. Georgian and English summaries) **80l:54022**
Devlin, Keith J. (*with* Shelah, Saharon) Souslin properties and tree topologies. **80m:54031**
Giuli, Eraldo A Stone-Weierstrass theorem for sheaves. (Italian. English summary) **80k:54031**
Juhász, I. (*with* Weiss, William) Martin's axiom and normality. **80a:54028**
Kombarov, A. P. A theorem of Corson. (Russian. English summary) **80c:54016**
van Mill, Jan (*with* Wattel, E.) An external characterization of spaces which admit binary normal subbases. **80a:54029**
Noiri, Takashi A characterization of almost-regular spaces. (Serbo-Croatian summary) **80d:54018**
Pol, Roman A non-paracompact space whose countable product is perfectly normal. **80a:54030**
Reilly, Ivan L. On T_0' spaces. **80d:54019**
Rudin, Mary Ellen The undecidability of the existence of a perfectly normal nonmetrizable manifold. **80j:54014**
Shelah, Saharon *See* **Devlin, Keith J., 80m:54031**
Smith, J. C. On collectionwise normality. **80d:54020**
Applications of shrinkable covers. **80b:54023**
Suzuki, Jingoro The normality of product with a paracompact M-space. **80a:54031**
Tedeschi, Giulio On a generalization of the separation axioms. (Italian. English summary) **80a:54032**
Vaughan, J. E. A countably compact, first countable, nonnormal T_2-space. **80e:54022**
Wattel, E. *See* **van Mill, Jan, 80a:54029**
Weiss, William *See* **Juhász, I., 80a:54028**

Secondary classifications:

Hatzenbuhler, James (*with* Mattson, Don A.) On Hausdorff compactifications of non-locally compact spaces. **(80k:54039)**
Ikeda, Yoshito RC-mappings and almost normal spaces. **(80k:54021)**
Kerre, E. Characterization of normality in fuzzy topological spaces. **(80b:54006)**
Malý, Jan A note on separation of sets by approximately continuous functions. **(80b:26004)**
Mattson, Don A. *See* **Hatzenbuhler, James, (80k:54039)**
Nakanishi, Shizu Completions of ranked spaces. I. **(80j:54026a)**
Nogina, E. Ju. Enumerable topological spaces. (Russian) **(80e:03051)**
Przymusiński, Teodor C. Collectionwise normality and absolute retracts. **(80g:54021a)**
Collectionwise normality and extensions of continuous functions. **(80g:54021b)**
Normality and paracompactness in finite and countable Cartesian products. **(80m:54010)**

54D18 Paracompactness, pointwise paracompactness, etc.

Arya, Shashi Prabha *See* **Singal, M. K., 80a:54036**
Bombini, Fernando Two observations concerning strong paracompactness and countable paracompactness. (Italian. English summary) **80l:54023**
Gates, Catherine L. On coabsolute paracompact spaces. **80l:54024**
Junnila, Heikki J. K. Metacompactness, paracompactness, and interior-preserving open covers. **80b:54024**
Kovačević, Ilija Almost regularity as a relaxation of nearly paracompactness. **80a:54033**
On nearly strongly paracompact and almost-strongly paracompact spaces. **80a:54034**
Liu, Ying Ming A class of topological spaces containing all metacompact and subparacompact spaces. (Chinese) **80a:54035**
Mizokami, Takemi Metacompactness and subparacompactness of product spaces. **80k:54026**
Singal, M. K. (*with* Arya, Shashi Prabha) A note on peripherally $\mathfrak{M}$-paracompact spaces. **80a:54036**
Tamano, Ken-ichi (*with* Yajima, Yukinobu) On total paracompactness and total metacompactness. **80k:54032**
Yajima, Yukinobu On the order star-finite and closure-preserving covers. **80e:54023**
See also **Tamano, Ken-ichi, 80k:54032**

Secondary classifications:

Balogh, Z. Metrization theorems concerning relative compactness. **(80d:54003)**
Bennett, H. R. (*with* Lutzer, David J.) Ordered spaces with σ-minimal bases. **(80l:54027)**
Fleischer, Isidore Paracompactness for ordered sums. **(80b:54039)**
Kovačević, Ilija On nearly paracompact spaces. **(80b:54028)**
Lutzer, David J. Pixley-Roy topology. **(80m:54012)**
See also **Bennett, H. R., (80j:54027)**
Nyikos, Peter J. Covering properties on σ-scattered spaces. **(80k:54045)**
Okuyama, Akihiro Note on hyperspaces consisting of compact sets. **(80k:54012)**
Przymusiński, Teodor C. Normality and paracompactness in finite and countable Cartesian products. **(80m:54010)**
Roitman, Judy Paracompact box products in forcing extensions. **(80j:03078)**
Smith, J. C. On collectionwise normality. **(80d:54020)**

54D20 Covering properties: Lindelöf, (m, n)-compact, etc.

van Douwen, Eric K. (*with* Pfeffer, Washek F.) Some properties of the Sorgenfrey line and related spaces. **80h:54027**
Gardner, R. J. *See* **Gruenhage, Gary, 80d:54021**
Gruenhage, Gary (*with* Gardner, R. J.) Completeness and weak covering properties, and measure-compactness. **80d:54021**
On closed images of orthocompact spaces. **80l:54025**
Heisey, Richard E. An example on normal covers. **80k:54033**
Junnila, Heikki J. K. On submetacompactness. **80j:54015**
Kovačević, Ilija On nearly paracompact spaces. **80b:54028**
Mathur, Asha A note on S-closed spaces. **80e:54024**
Noiri, Takashi Almost-closed images of countably paracompact spaces. **80c:54017**
Pfeffer, Washek F. *See* **van Douwen, Eric K., 80h:54027**
Roitman, Judy A reformulation of S and L. **80j:54016**

Secondary classifications:

Arhangel'skiĭ, A. V. A theorem on cardinality. (Russian) **(80k:54003)**
Bombini, Fernando Two observations concerning strong paracompactness and countable paracompactness. (Italian. English summary) **(80l:54023)**
Čigogidze, A. Č. The Uryson-Menger inequality. (Russian. Georgian and English summaries) **(80l:54022)**
Joseph, James E. A note on pseudocompact spaces. **(80g:54030)**
Multifunctions and cluster sets. **(80f:54011)**
Juhász, I. (*with* Weiss, William) On a problem of Sikorski. **(80g:54006)**
Junnila, Heikki J. K. Metacompactness, paracompactness, and interior-preserving open covers. **(80b:54024)**
Okuyama, Akihiro Note on hyperspaces consisting of compact sets. **(80k:54012)**
Roitman, Judy More paracompact box products. **(80l:54006)**
Rudin, Mary Ellen Hereditary normality and Souslin lines. **(80b:03071)**
Saks, Victor Ultrafilter invariants in topological spaces. **(80h:54003)**
Suzuki, Jingoro The normality of product with a paracompact M-space. **(80a:54031)**
Weiss, William *See* **Juhász, I., (80g:54006)**

54D25 "P-minimal" and "P-closed" spaces

Cameron, Douglas E. A survey of maximal topological spaces. **80k:54034**
A note on maximal pseudocompactness. **80j:54017**
Herrmann, Robert A. rc-convergence. **80c:54018**
Joseph, James E. Characterizations of completely Hausdorff-closed spaces via graphs and projections. **80a:54037**
A note on completely Hausdorff-closed spaces. (French summary) **80f:54013**
Kunen, Kenneth (*with* van Mill, Jan; Mills, Charles F.) On nowhere dense closed P-sets. **80h:54029**
van Mill, Jan *See* **Kunen, Kenneth; et al., 80h:54029**
Mills, Charles F. *See* **Kunen, Kenneth; et al., 80h:54029**

Secondary classifications:

Herrington, Larry L. *See* **Long, Paul E., (80g:54011)**
Long, Paul E. (*with* Herrington, Larry L.) Basic properties of regular-closed functions. **(80g:54011)**

54D30 Compact spaces and generalizations

Alster, K. Some remarks on Eberlein compacts. **80k:54035**
Baĭkirov, A. I. Maximal almost disjoint systems and Franklin bicompacta. (Russian) **80m:54032**
Bell, Murray G. A cellular constraint in supercompact Hausdorff spaces. **80d:54022**
Feiste, Uwe A characterization of a certain class of compact metric spaces. **80f:54014**
Fleischer, Isidore On: "Subcompactness and the Baire category theorem" [Indag. Math. 25 (1963), 761–767; MR 28 #2520] by J. de Groot. **80g:54029**
Govaerts, W. E-compactness and continuous function spaces. **80e:54025**
(de Groot, Johannes) *See* **Fleischer, Isidore, 80g:54029**
Hdeib, H. Z. *See* **Pareek, C. M., 80d:54024**
Herrmann, Robert A. Maximum one point near-compactifications. (Italian summary) **80k:54036**
Hušek, Miroslav Special classes of compact spaces. **80j:54018**
Joseph, James E. A note on pseudocompact spaces. **80g:54030**
Some new compactness characterizations from graphs. **80l:54026**
Pseudocompactness and closed subsets of products. **80f:54015**
Laidacker, Michael Subsets of compacta. **80a:54038**
Levine, Norman Spaces in which the closure of a compact set is compact. **80a:54039**
van Mill, Jan (*with* Mills, Charles F.) On the character of supercompact spaces. **80k:54037**
(*with* Schrijver, Alexander) Subbase characterizations of compact topological spaces. **80d:54023**
(*with* Mills, Charles F.) Closed G_δ subsets of supercompact Hausdorff spaces. **80e:54026**
See also **Mills, Charles F., 80m:54033**
Mills, Charles F. (*with* van Mill, Jan) A nonsupercompact continuous image of a supercompact space. **80m:54033**
See also **van Mill, Jan, 80e:54026** *and* **van Mill, Jan, 80k:54037**
Mioduszewski, Jerzy Compact Hausdorff spaces with two open sets. **80a:54040**
Nyikos, Peter J. On the product of metacompact spaces. I. Connections with hereditary compactness. **80a:54041**
Pareek, C. M. (*with* Hdeib, H. Z.) A note on $[a, b]$-compact spaces. **80d:54024**
Schrijver, Alexander *See* **van Mill, Jan, 80d:54023**
Simon, Petr Divergent sequences in bicompacta. (Russian) **80e:54027**
Thompson, Travis SQ-closed spaces. **80a:54042**
Tironi, Gino On locally compact paracompact spaces. (Italian summary) **80e:54028**
Tkačenko, M. G. Bicompacta that are representable as the union of a countable number of left subspaces. I, II. (Russian. English summary) **80e:54029**

Secondary classifications:

Cameron, Douglas E. A note on maximal pseudocompactness. **(80j:54017)**
Chung, Woon Kyung A note on the compactness of R-proximity spaces. (Chinese summary) **(80g:54034)**
Dutta, R. (*with* Misra, D. N.) Super almost compact and ξ-almost compact extensions. **(80d:54027)**
Friedberg, Michael Compactifications of finite-dimensional cones. **(80b:22003)**
Höhle, Ulrich Probabilistisch kompakte L-unscharfe Mengen. (English summary) **(80b:54005)**
Junnila, Heikki J. K. On submetacompactness. **(80j:54015)**
Ljakssenburg, L. A. The transfinite dimension of metric spaces. (Russian) **(80d:54047)**
Misra, D. N. *See* **Dutta, R., (80d:54027)**
Nepomnjaščiĭ, G. M. Multiplicative extension operators. (Russian) **(80j:54006)**
Noiri, Takashi A characterization of almost-regular spaces. (Serbo-Croatian summary) **(80d:54018)**

54D35 Compactifications, etc.

Abian, Alexander (*with* Salbany, Sergio) Wallman compactification and matrices of zeroes and ones. **80f:54016**
Blaszczyk, A. On pseudocompact extensions. **80d:54025**
Cammaroto, Filippo (*with* Lo Faro, Giovanni) Properties of specially closed filters, and a new characterization of nearly compact spaces. (Italian. English summary) **80e:54030**
Choe, Tae Ho (*with* Park, Young Soo) Wallman's type order compactification. **80m:54034**
Čigogidze, A. Č. On bicompact extensions of Tychonoff spaces. **80k:54038**
Comfort, W. Wistar Compactifications: recent results from several countries. **80m:54035**
(*with* O'Callaghan, Liam) Spaces Y homeomorphic to $\beta Y \setminus Y$. **80d:54026**
van Douwen, Eric K. (*with* Przymusiński, Teodor C.) First countable and countable spaces all compactifications of which contain $\beta\mathbf{N}$. **80e:54031**
Dutta, R. (*with* Misra, D. N.) Super almost compact and ξ-almost compact extensions. **80d:54027**
Hatzenbuhler, James (*with* Mattson, Don A.) On Hausdorff compactifications of non-locally compact spaces. **80k:54039**
Hoshina, Takao Countable-points compactifications for metric spaces. **80j:54019**
Hunsaker, W. N. (*with* Lindgren, W. F.) First countable compactifications. **80b:54025**
Ivanov, O. V. (*with* Pomel'nikov, Ju. V.; Suvorov, G. D.) Conformally invariant bicompact extensions of a simply connected domain. (Russian) **80k:54040**
Kumar, Vinod Compactification of a convergence space. **80c:54019**
Levin, M. A. (*with* Timohovič, V. L.) M-spaces and strong countable compactifiability. (Russian. English summary) **80e:54032**
Lindgren, W. F. *See* **Hunsaker, W. N., 80b:54025**
Lo Faro, Giovanni *See* **Cammaroto, Filippo, 80e:54030**
Malyhin, V. I. $\beta\mathbf{N}$ is prime. (Russian summary) **80f:54027**
Mattson, Don A. *See* **Hatzenbuhler, James, 80k:54039**
Misra, D. N. *See* **Dutta, R., 80d:54027**
O'Callaghan, Liam *See* **Comfort, W. Wistar, 80d:54026**
Park, Young Soo *See* **Choe, Tae Ho, 80m:54034**
Pomel'nikov, Ju. V. *See* **Ivanov, O. V.; et al., 80k:54040**
Przymusiński, Teodor C. *See* **van Douwen, Eric K., 80e:54031**
Salbany, Sergio *See* **Abian, Alexander, 80f:54016**
Schröder, Johann Das Wallman-Verfahren und inverse Limites. (English summary) **80a:54043**
Stratigos, Panagiotis D. Wallman compactification, Stone-Čech compactification and relative compactness in the vague topology. **80k:54041**
Suvorov, G. D. *See* **Ivanov, O. V.; et al., 80k:54040**
Timohovič, V. L. *See* **Levin, M. A., 80e:54032**
Tzung, Fu Chien Sufficient conditions for the set of Hausdorff compactifications to be a lattice. **80a:54044**
Wattel, E. Normally supercompact spaces and convexity preserving maps. **80f:54028**
Woodruff, David S. Compactifications and function algebras. (Italian summary) **80c:54020**

Secondary classifications:

Abian, Alexander (*with* Salbany, Sergio) Dyadic matrices and Wallman compactification. **(80k:15023)**
Blasco Olcina, José Luis Complete bases and Wallman realcompactifications. **(80g:54033)**
Charalambous, M. G. Compactifications with countable remainder. **(80h:54030)**
Filippov, V. V. The dimension of spaces with operation of a bicompact group. (Russian) **(80f:54031)**
Gonshor, Harry Enlargements of Boolean algebras and Stone space. **(80g:06017)**
Herrmann, Robert A. Convergence spaces and nonstandard compactifications. **(80g:54058)**
Kent, D. C. (*with* Richardson, G. D.) Compactifications of convergence spaces. **(80i:54004)**
Lowen, Robert A comparison of different compactness notions in fuzzy topological spaces. **(80c:54007)**
Malyhin, V. I. Fréchet-Uryson bicompacts: π-points and Stone-Čech extensions. (Russian) **(80d:54029)**
Richardson, G. D. *See* **Kent, D. C., (80i:54004)**
Salbany, Sergio *See* **Abian, Alexander, (80k:15023)**
Szymański, Andrzej Some Baire category type theorems for $U(\omega_1)$. **(80i:03060)**

54D40 Remainders

Balcar, Bohuslav (*with* Frankiewicz, Ryszard) To distinguish topologically the spaces m^*. II. (Russian summary) **80b:54026**
Charalambous, M. G. Compactifications with countable remainder. **80h:54030**
Cohen, Paul E. P-points in random universes. **80m:54036**
van Douwen, Eric K. Why certain Čech-Stone remainders are not homogeneous. **80f:54029**
Frankiewicz, Ryszard *See* **Balcar, Bohuslav, 80b:54026**
Kimura, Nobuo A proof for the existence of a type with countable infinite relative types. **80k:54042**
Mioduszewski, Jerzy On composants of $\beta R - R$. **80g:54031**
Rayburn, Marion C. Maps and k-normal spaces. **80h:54031**

Secondary classifications:

van Douwen, Eric K. (*with* van Mill, Jan) Parovičenko's characterization of $\beta\omega - \omega$ implies CH. **(80b:04007)**
Hindman, Neil Simultaneous idempotents in $\beta\mathbf{N}\setminus\mathbf{N}$ and finite sums and products in N. **(80f:05005)**
Hoshina, Takao Countable-points compactifications for metric spaces. **(80j:54019)**
Hunsaker, W. N. (*with* Lindgren, W. F.) First countable compactifications. **(80b:54025)**
Lindgren, W. F. *See* **Hunsaker, W. N., (80b:54025)**
van Mill, Jan Extenders from $\beta X - X$ to βX. (Russian summary) **(80g:54015)**
See also **van Douwen, Eric K., (80b:04007)**
Veksler, A. I. P'-spaces. (Russian) **(80b:54032)**

54D45 Local compactness, σ-compactness

Herrlich, Horst (*with* Kannan, V.; Rajagopalan, M.) Local compactness and simple extensions of discrete spaces. **80k:54043**
Kannan, V. (*with* Rajagopalan, M.) Hereditarily locally compact separable spaces. **80k:54030**
See also **Herrlich, Horst; et al., 80k:54043**
Rajagopalan, M. *See* **Kannan, V., 80i:54030** *and* **Herrlich, Horst; et al., 80k:54043**

Secondary classifications:

Franklin, Stanley P. (*with* Thomas, Barbara V. Smith) A survey of k_ω-spaces. **(80k:54044)**
Thomas, Barbara V. Smith *See* **Franklin, Stanley P., (80k:54044)**

54D50 k-spaces

Abramovič, Ju. A. A new class of Fréchet-Uryson spaces. (Russian) **80c:54021**
Berner, Andrew J. Generalizations of quasi-k spaces. **80i:54031**
Borges, Carlos R. Compact-open versus k-compact-open. **80b:54027**
Franklin, Stanley P. (*with* Thomas, Barbara V. Smith) A survey of k_ω-spaces. **80k:54044**
Hasuo, Yutaka On a Cartesian closed category. **80c:54022**
Tanaka, Yoshio Some necessary conditions for products of k-spaces. **80a:54045**
A characterization for the product of closed images of metric spaces to be a k-space. **80d:54028**
Thomas, Barbara V. Smith *See* **Franklin, Stanley P., 80k:54044**

Secondary classifications:

Boone, James R. On open mappings, closed mappings, and ordinal invariants. **(80b:54013)**
Pseudo-open functions are monotonic decreasing for ordinal and cardinal invariants. **(80k:54020)**
Kannan, V. Ordinal invariants in topology. II. Sequential order of compactifications. **(80m:54037)**

54D55 Sequential spaces

Frič, Roman (*with* Koutník, Václav) Sequentially complete spaces. **80i:54032**
Kannan, V. Ordinal invariants in topology. II. Sequential order of compactifications. **80m:54037**
Koutník, Václav *See* **Frič, Roman, 80i:54032**
Malyhin, V. I. Fréchet-Uryson bicompacts: π-points and Stone-Čech extensions. (Russian) **80d:54029**
Popov, V. V. (*with* Rančin, D. V.) A strengthening of the Fréchet-Uryson property. (Russian. English summary) **80f:54017**
Rančin, D. V. *See* **Popov, V. V., 80f:54017**
Sharma, P. L. Some characterizations of W-spaces and w-spaces. **80a:54046**
Zolotarev, V. P. The intersection of topologies and sequential spaces. (Russian. English summary) **80g:54032**

Secondary classifications:

Boone, James R. Pseudo-open functions are monotonic decreasing for ordinal and cardinal invariants. **(80k:54020)**
Kannan, V. (*with* Rajagopalan, M.) Hereditarily locally compact separable spaces. **(80i:54030)**
Rajagopalan, M. *See* **Kannan, V., (80i:54030)**
Tkačenko, M. G. Bicompacta that are representable as the union of a countable number of left subspaces. I, II. (Russian. English summary) **(80e:54029)**

54D60 Realcompactness and realcompactification

Blasco Olcina, José Luis Complete bases and Wallman realcompactifications. **80g:54033**
Evstigneev, V. G. Distribution of bicompact Q-extensions. (Russian) **80d:54030**
Kato, Akio Realcompactness of box products. **80h:54032**

Secondary classifications:

Reynolds, George D. (*with* Rice, Michael D.) Completeness and covering properties of uniform spaces. **(80i:54035)**
Rice, Michael D. *See* **Reynolds, George D., (80i:54035)**

54D99 None of the above, but in this section

Anantharaman, R. (*with* Murdeshwar, M. G.) Invariance under optimally continuous functions. **80a:54047**
Aull, Charles E. Accessibility spaces, k-spaces and initial topologies. **80d:54031**
Cameron, Douglas E. Some Δ-maximal topologies. **80e:54033**
Fleissner, William G. (*with* Reed, George M.) Para-Lindelöf spaces and spaces with a σ-locally countable base. **80j:54020**
Kent, D. C. (*with* Richardson, G. D.) Some product theorems for convergence spaces. **80h:54033**
Lavallee, L. D. Circle spaces. **80f:54018**
McCartan, S. D. Minimal T_{ES}-spaces and minimal T_{EF}-spaces. **80e:54034**
Murdeshwar, M. G. *See* **Anantharaman, R., 80a:54047**
Nyikos, Peter J. Covering properties on σ-scattered spaces. **80k:54045**
Reed, George M. *See* **Fleissner, William G., 80j:54020**
Richardson, G. D. *See* **Kent, D. C., 80h:54033**
Vaughan, J. E. Discrete sequences of points. **80k:54046**
van de Vel, M. Superextensions and Lefschetz fixed-point structures. **80i:54033**

Secondary classifications:

Felchlinger, Oskar Hyperspaces with the kappa topology. **(80k:54011)**
Hoffmann, Rudolf-E. Topological spaces admitting a "dual". **(80j:54001)**
Janicka, Renata (*with* Kaczor, Wiesława) On the construction of some measures of noncompactness. (Polish and Russian summaries) **(80a:47107)**
Kaczor, Wiesława *See* **Janicka, Renata, (80a:47107)**
Murphy, Thomas N. A criterion for the existence of P-points. (French summary) **(80a:54056)**
Ormoczadze, R. N. Behavior of some classes of spaces and the dimension under continuous mappings. (Russian. Georgian and English summaries) **(80i:54014)**
c-scattered and scattered mappings. (Russian. English and Georgian summaries) **(80m:54023)**
Wicke, Howard H. (*with* Worrell, J. M., Jr.) Spaces which are scattered with respect to collections of sets. **(80k:54052)**
Worrell, J. M., Jr. *See* **Wicke, Howard H., (80k:54052)**

54Exx Spaces with richer structures

54E05 Proximity structures and generalizations

Aparina, L. V. Proximity spaces defined by various families of proximally continuous real functions. (Russian) **80k:54047**
Chung, Woon Kyung A note on the compactness of R-proximity spaces. (Chinese summary) **80g:54034**
Doĭčinov, Doĭčin Les espaces topologiques, les espaces de proximité et les espaces uniformes d'un point de vue général. **80d:54032**
Fletcher, P. *See* **Lindgren, W. F., 80b:54037**
Hamburg, Ilesna Opérations avec des espaces de proximité. **80a:54048**
Lal, P. K. *See* **Lal, R. N., 80e:54035**
Lal, R. N. (*with* Lal, P. K.) Neighboformity. **80e:54035**
Lindgren, W. F. (*with* Fletcher, P.) A theory of uniformities for generalized ordered spaces. **80b:54037**
Marny, Thomas Proximal limit spaces. **80a:54049**
Mattson, Don A. Discrete subsets of proximity spaces. **80b:54028**

54E10 p-maps

54E15 Uniform structures and generalizations

Abian, Alexander A uniform structure for topological spaces. **80a:54050**
Borşan, D. The biquasiuniform structure induced by a g-quasipseudometric. (Romanian. English summary) **80e:54036**
Curzer, Howard (*with* Hager, Anthony W.) Zero-set ultrafilters and G_δ-closures in uniform spaces. **80m:54038**
Fox, Ralph (*with* Reilly, Ivan L.) Topological spaces and Abian structures. **80c:54023**
Gazik, R. J. *See* **Kent, D. C., 80b:54029**
Hager, Anthony W. Semicompact cozero-fields and uniform spaces. **80d:54033**
See also **Curzer, Howard, 80m:54038**
Hušek, Miroslav Products of uniform spaces. **80m:54039**
Kent, D. C. (*with* Gazik, R. J.) Minimal uniform convergence spaces. **80b:54029**
Khurana, Surjit Singh A completeness property of some function spaces. **80g:54035**
Kuĉia, Gert Contributions to the theory of pseudo-uniform spaces. **80i:54034**
Kurepa, Đuro Genesis of uniform spaces. **80j:54021**
Makai, E., Jr. The isomorphisms of the category of uniform spaces and related categories. **80a:54051**
Reichel, Hans-Christian Some results on uniform spaces with linearly ordered bases. **80f:54019**
Reilly, Ivan L. *See* **Fox, Ralph, 80c:54023**
Reynolds, George D. (*with* Rice, Michael D.) Completeness and covering properties of uniform spaces. **80i:54035**
Rice, Michael D. *See* **Reynolds, George D., 80i:54035**
Seyedin, Massood Completion of members of the Pervin quasi-proximity class. **80c:54034**
Tashjian, G. (*with* Vilímovský, J.) Coreflectors not preserving the interval and Baire partitions of uniform spaces. **80j:54022**
Vilímovský, J. *See* **Tashjian, G., 80j:54022**
Ward, A. J. Proof of a theorem of A. P. and W. Robertson on completeness under the Hausdorff uniformity. **80c:54025**

Secondary classifications:

Brace, J. W. (*with* Thomison, J. D.) Uniform filter convergence and pointwise filter convergence for function spaces. **(80h:46031)**
Denibes, Ali Mesures sur les espaces uniformes de type (σ_1^∞). **(80j:28020)**
Frič, Roman (*with* Kent, D. C.) Completion functors for Cauchy spaces. **(80m:54042)**
Hudaĭberdiev, V. N. A generalization of the concept of convergence. (Russian) **(80k:54002)**
Hušek, Miroslav (*with* Rice, Michael D.) Productivity of coreflective subcategories of uniform spaces. **(80e:54008)**
Kent, D. C. *See* **Frič, Roman, (80m:54042)**
Kulpa, W. Some factorization theorems for closed subspaces. **(80k:54016)**
Page, Warren ★Topological uniform structures. **(80c:46001)**
Pták, P. On extensions of uniformly continuous Banach-space-valued mappings. **(80b:54011)**
Rice, Michael D. *See* **Hušek, Miroslav, (80e:54008)**
Thomison, J. D. *See* **Brace, J. W., (80h:46031)**

54E17 Nearness spaces

Bentley, H. L. Correction to: "Normal nearness spaces" (Quaestiones Math. 2 (1977/78), no. 1-3, 23–43). **80b:54030**
(*with* Herrlich, Horst) Completeness is productive. **80i:54036**
Herrlich, Horst *See* **Bentley, H. L., 80i:54036**
Hong, Sung Sa (*with* Nel, Louis D.; Rho, Jae Chul) Nearness structure of $C(X)$. **80b:54031**
Nel, Louis D. *See* **Hong, Sung Sa; et al., 80b:54031**
Rho, Jae Chul *See* **Hong, Sung Sa; et al., 80b:54031**

Secondary classifications:

Heldermann, N. C. Hausdorff nearness spaces. **(80k:54014)**

54E18 p-spaces, M-spaces, σ-spaces, etc.

Balogh, Z. On the structure of spaces which are paracompact p-spaces hereditarily. **80k:54048**
Dolgušev, A. N. Topological structure of $\mathfrak{M}$-compacta. (Russian) **80i:54037**
Goldovt, I. Ju. (*with* Timohovič, V. L.) Saturation of topological spaces and the Morita problem. (Russian) **80m:54040**
Jakovlev, N. N. g-metrizable spaces. (Russian) **80e:54037**
Sennott, L. I. Some remarks on M-embedding. **80k:54049**
Timohovič, V. L. *See* **Goldovt, I. Ju., 80m:54040**
Vekaler, A. I. P'-spaces. (Russian) **80b:54032**

Secondary classifications:

Davis, S. W. A nondevelopable Čech-complete space with a point-countable base. **(80i:54046)**
Gittings, Raymond F. Products of generalized metric spaces. **(80d:54004)**
Ishii, Tadashi (*with* Ohta, Haruto) Generalizations of C-embedding and their applications. **(80e:54012)**
Levin, M. A. (*with* Timohovič, V. L.) M-spaces and strong countable compactifiability. (Russian. English summary) **(80e:54032)**
Mizokami, Takemi Metacompactness and subparacompactness of product spaces. **(80b:54026)**
Ohta, Haruto *See* **Ishii, Tadashi, (80e:54012)**
Šamgunov, N. K. On perfect images of feathered spaces. (Russian) **(80g:54013)**
Timohovič, V. L. *See* **Levin, M. A., (80e:54032)**

54E20 Stratifiable spaces, cosmic spaces, etc.

Bennett, H. R. (*with* Berney, E. S.) Spaces with σ-minimal bases. **80k:54050**
Berney, E. S. *See* **Bennett, H. R., 80k:54050**
Borges, Carlos R. Direct sums of stratifiable spaces. **80i:54038**
Dranišnikov, A. N. Compatible annihilation of closed set families, κ-metrizable and stratifiable spaces. (Russian) **80e:54038**
Lee, Kyung Bai Spaces in which compacta are uniformly regular G_δ. **80i:54039**

54E25 Semimetric spaces

Arhangel'skiĭ, A. V. (*with* Nedev, Stojan Ĭ.) Some remarks on semi-metrizable spaces and their subspaces. **80c:54026**
Burke, Dennis K. On K-semimetric spaces. **80b:54033**
Davis, S. W. (*with* Gruenhage, Gary; Nyikos, Peter J.) G_δ sets in symmetrizable and related spaces. **80a:54052**
Gruenhage, Gary *See* **Davis, S. W.; et al., 80a:54052**
Jakovlev, N. N. O-metrizable spaces. (Russian) **80g:54036**
Kenton, S. A. (*with* Shore, S. D.) The Pixley-Roy space is continuously semimetrizable. **80b:54034**
Nedev, Stojan Ĭ. *See* **Arhangel'skiĭ, A. V., 80c:54026**
Nyikos, Peter J. *See* **Davis, S. W.; et al., 80a:54052**
Shore, S. D. *See* **Kenton, S. A., 80b:54034**

Secondary classifications:

Bennett, H. R. (*with* Berney, E. S.) Spaces with σ-minimal bases. **(80k:54050)**
Berney, E. S. *See* **Bennett, H. R., (80k:54050)**

54E30 Moore spaces

Burke, Dennis K. Pseudo-open mappings from topological sums. **80h:54034**
van Douwen, Eric K. There is no universal separable Moore space. **80f:54020**
Nyikos, Peter J. The normal Moore space problem. **80k:54051**
Wicke, Howard H. (*with* Worrell, J. M., Jr.) Spaces which are scattered with respect to collections of sets. **80k:54052**
Worrell, J. M., Jr. *See* **Wicke, Howard H., 80k:54052**

Secondary classifications:

Rudin, Mary Ellen The undecidability of the existence of a perfectly normal nonmetrizable manifold. **(80j:54014)**

54E35 Metric spaces, metrizability

Bázísi, Svetlana Nagata's metric for uniformities. (Russian summary) **80f:54021**
Dalla Vedova, Elvira Tognoli A theorem on coverings. (Italian. English summary) **80m:54041**
Hameed, Abdul *See* **Pareek, C. M., 80d:54034**
Luukkainen, Jouni Extension of spaces, maps, and metrics in Lipschitz topology. **80h:54035**
Minokami, Takemi On submetrizability and G_δ-diagonals. **80j:54023**
Nadler, Sam B., Jr. The metric confluent images of half-lines and lines. **80i:54040**
Pareek, C. M. (*with* Hameed, Abdul) Metrizability of topological spaces via covers. **80d:54034**
Wicke, Howard H. Using θ-space concepts in base of countable order theory. **80k:54053**

Secondary classifications:

Alsina, Claudi On countable products and algebraic convexifications of probabilistic metric spaces. **(80a:54056)**
Balogh, Z. Metrization theorems concerning relative compactness. **(80d:54003)**
Bennett, H. R. Pixley-Roy spaces and Heath planes. **(80k:54009)**
Franklin, Stanley P. (*with* Thomas, Barbara V. Smith) A survey of k_ω-spaces. **(80k:54044)**
Gregorius, Hans-Rolf (*with* Ziehe, Martin) Iterations of continuous mappings on metric spaces. Asymptotic stability and Lyapunov functions. **(80h:54010)**
Guljanickiĭ, L. F. Some functional concepts in discrete spaces. (Russian. English summary) **(80h:52002)**
Ivanov, A. V. The imbedding of countable derivatives of separable metric spaces into weakly infinite-dimensional compacta. (Russian) **(80b:54013)**
Janos, Ludvik (*with* Ko, Hwei Mei; Tan, Kok Keong) Edelstein's contractivity and attractors. **(80k:54084)**
Klebanov, B. S. Closed images of products of metric spaces. (Russian) **(80k:54022)**
Ko, Hwei Mei *See* **Janos, Ludvik; et al., (80k:54084)**
Korovkiĭ, I. M. Absolute polyhedral expansions of metric spaces. (Russian) **(80i:54012)**
Krivonosov, L. N. Two topological invariants of metrizable spaces and their connection with dimension. (Russian) **(80d:54046)**
Lee, Cheng-Ming An existence theorem via an intuitive idea and fixed-point theorems. **(80h:54061)**
Lew, John S. Some counterexamples in multidimensional scaling. **(80a:54053)**
Liu, Li Yu *See* **Liu, Ying Ming, (80i:54008)**
Liu, Ying Ming (*with* Liu, Li Yu) Metrization of adjunction spaces. (Chinese) **(80i:54008)**
Lutzer, David J. Pixley-Roy topology. **(80m:54012)**
Mandelkern, Mark Suprema of located sets. **(80k:03066)**
Nogina, E. Ju. Enumerable topological spaces. (Russian) **(80e:03051)**
Tan, Kok Keong *See* **Janos, Ludvik; et al., (80k:54084)**
Thomas, Barbara V. Smith *See* **Franklin, Stanley P., (80k:54044)**
Ziehe, Martin *See* **Gregorius, Hans-Rolf, (80h:54010)**

54E40 Isometries, contractions, expansions

Dugundji, J. (*with* Granas, Andrzej) Weakly contractive maps and elementary domain invariance theorem. **80d:54035**
Granas, Andrzej *See* **Dugundji, J., 80d:54035**
Lew, John S. Some counterexamples in multidimensional scaling. **80a:54053**
Timan, A. F. *See* **Vestfrid, I. A., 80e:54039**
Vestfrid, I. A. (*with* Timan, A. F.) A universality property of Hilbert spaces. (Russian) **80e:54039**

Secondary classifications:

Borov, A. N. An isoperimetric property of contraction mappings. (Russian) **(80e:53074)**
Cruba, Stanisław T. R-continua and contractibility of dendroids. (Russian summary) **(80k:54061)**
Gruber, Peter M. Isometries of the space of convex bodies of E^d. **(80c:52005)**
Luukkainen, Jouni Extension of spaces, maps, and metrics in Lipschitz topology. **(80h:54035)**

54E45 Compact (locally compact) metric spaces

Mills, Charles F. A simpler proof that compact metric spaces are supercompact. **80d:54036**

Secondary classifications:

Alster, K. Some remarks on Eberlein compacts. **(80k:54035)**
Bridges, Douglas S. On continuous mappings between locally compact metric spaces. **(80i:03069)**
Jacquot, Bernard Caractérisation des compacts metriques contenant un arc. **(80j:51016)**
van Mill, Jan (*with* Schrijver, Alexander) Subbase characterizations of compact topological spaces. **(80d:54023)**
Saint-Raymond, Jean La structure borélienne d'Effros est-elle standard? **(80g:54044)**
Schrijver, Alexander *See* **van Mill, Jan, (80d:54023)**

54E50 Complete metric spaces

Efremovič, V. A. *See* **Vainštein, A. G.; et al., 80c:54027**
Gruenhage, Gary A note on the product of Fréchet spaces. **80k:54054**
Loginov, È. A. *See* **Vainštein, A. G.; et al., 80c:54027**
Morgan, John C., II On the absolute Baire property. **80f:54022**
Vainštein, A. G. (*with* Efremovič, V. A.; Loginov, È. A.) Points at infinity of metric spaces. (Russian) **80c:54027**

Secondary classifications:

Bourgain, Jean Some remarks on compact sets of first Baire class. **(80j:54008)**
Frič, Roman (*with* Koutník, Václav) Sequentially complete spaces. **(80i:54032)**
Gardner, R. J. *See* **Gruenhage, Gary, (80d:54021)**
Gruenhage, Gary (*with* Gardner, R. J.) Completeness and weak covering properties, and measure-compactness. **(80d:54021)**
Koutník, Václav *See* **Frič, Roman, (80i:54032)**
Louveau, Alain Familles séparantes pour les ensembles analytiques. (English summary) **(80i:04004)**
Maharam, Dorothy (*with* Stone, A. H.) Realizing isomorphisms of category algebras. **(80a:54021)**
Stone, A. H. *See* **Maharam, Dorothy, (80a:54021)**

54E52 Completions, Baire category

Frič, Roman (*with* Kent, D. C.) Completion functors for Cauchy spaces. **80m:54042**
Guido, Cosimo Completions of a topological space with respect to a family of filters on S. (Italian. English summary) **80c:54028**
Kent, D. C. *See* **Frič, Roman, 80m:54042**
Pol, Roman Note on category in Cartesian products of metrizable spaces. **80c:54029**
Sander, Wolfgang (*with* Slipek, K.) A generalization of a theorem of Banach. (Italian summary) **80h:54036**
Slipek, K. *See* **Sander, Wolfgang, 80h:54036**

Secondary classifications:

Bentley, H. L. (*with* Herrlich, Horst) Completeness is productive. **(80i:54036)**
Herrlich, Horst *See* **Bentley, H. L., (80i:54036)**
Hudalberdiev, V. N. A generalization of the concept of convergence. (Russian) **(80k:54002)**

54E55 Bitopologies

Adnadjević, Dušan Separation axioms and convergence in ordered bitopological spaces. (Russian. Georgian and English summaries) **80m:54043**
Arya, Shashi Prabha (*with* Singhal, A.) A note on pairwise D_1 spaces. (Serbo-Croatian summary) **80f:54023**
August, John (*with* Byrne, Charles) Completion of lattices of semi-continuous functions. **80h:54035**
Brümmer, G. C. L. Two procedures in bitopology. **80k:54055**
Byrne, Charles *See* **August, John, 80h:54035**
Lal, Sunder Pairwise concepts in bitopological spaces. **80a:54054**
Maheshwari, S. N. (*with* Prasad, R.) Semi-open sets and semicontinuous functions in bitopological spaces. **80e:54040**
(*with* Prasad, R.) On pairwise s-regular spaces. **80g:54037**
Mashhour, A. S. *See* **Tantawy, O. A., 80d:54037** *and* **Tantawy, O. A., 80d:54038**
Prasad, R. *See* **Maheshwari, S. N., 80e:54040** *and* **Maheshwari, S. N., 80g:54037**
Riecke, Caroll V. H-closure for bitopological spaces. **80f:54024**
Singhal, A. *See* **Arya, Shashi Prabha, 80f:54023**
Tantawy, O. A. (*with* Mashhour, A. S.) A note on pairwise-normality. (Arabic summary) **80d:54037**
(*with* Mashhour, A. S.) Pairwise-Aull and Thron axioms. (Arabic summary) **80d:54038**

Secondary classifications:

Ivanov, A. A. Structures of topological type. (Russian. English summary) **(80g:54002)**

54E60 CW-complexes, triangulable spaces

Secondary classifications:

Bognár, M. On complexes. **(80k:57036)**
Mas-Colell, Andreu A selection theorem for open graph correspondences with star-shaped values. **(80e:54059)**

54E65 Countability conditions, separability

Phillips, Thomas M. Primitive extensions of Aronszajn spaces. **80a:54055**

Secondary classifications:

Dalla Vedova, Elvira Tognoli A theorem on coverings. (Italian. English summary) **(80m:54041)**
García-Máynez, A. On σ-unicoherence. **(80k:54070)**
Louveau, Alain Familles séparantes pour les ensembles analytiques. (English summary) **(80f:04064)**
Morgan, John C., II On the absolute Baire property. **(80f:54022)**
Warrack, B. (*with* Willard, S.) Domains of first countability. (Serbo-Croatian summary) **(80g:54014)**
Willard, S. *See* **Warrack, B., (80g:54014)**

54E99 None of the above, but in this section

Alsina, Claudi On countable products and algebraic convexifications of probabilistic metric spaces. **80a:54056**
Atkins, John M. A note on metacompact developable spaces. **80d:54039**
Aull, Charles E. A survey paper on some base axioms. **80m:54044**
Davies, Peter Nonperfect spaces with point-countable bases. **80j:54024**
Gittings, Raymond F. Subclasses of p-spaces and strict p-spaces. **80j:54025**
Gruenhage, Gary Some results on spaces having an orthobase or a base of subinfinite rank. **80k:54056**
Höhle, Ulrich Probabilistische Metriken auf der Menge der nicht negativen Verteilungsfunktionen. **80k:54057**
Moynihan, Richard (*with* Schweizer, B.) Betweenness relations in probabilistic metric spaces. **80m:54045**
Nakanishi, Shizu Completions of ranked spaces. I. **80j:54026a**
Completions of ranked spaces. II. **80j:54026b**
Nikolić-Despotović, Danica Probabilistic metric spaces. (Serbo-Croatian) **80i:54041**
Phillips, Thomas M. Centered bases, nested bases, and completability of Aronszajn spaces. **80a:54057**
Rudin, Mary Ellen Pixley-Roy and the Souslin line. **80c:54030**
Schweizer, B. *See* **Moynihan, Richard, 80m:54045**
Wicke, Howard H. A functional characterization of primitive base. **80h:54037**

Secondary classifications:

Burgess, John P. Two selection theorems. **(80h:03069)**
Feichtinger, Oskar Hyperspaces with the kappa topology. **(80k:54011)**
Fleissner, William G. (*with* Reed, George M.) Para-Lindelöf spaces and spaces with a σ-locally countable base. **(80j:54020)**
Höhle, Ulrich Probabilistische Topologien. (English summary) **(80k:54005)**
Müller, Bernd $\mathfrak{L}_c$ und c einbettbare Limesräume. **(80e:46003)**
Nakanishi, Shizu On ranked union spaces. **(80i:46006)**
Reed, George M. *See* **Fleissner, William G., (80j:54020)**
Rindler, Harald Eine Charakterisierung gleichverteilter Folgen. **(80i:10067)**
Singh, S. L. Some contractive type principles on 2-metric spaces and applications. **(80k:54088)**
Tamano, Ken-ichi (*with* Yajima, Yukinobu) On total paracompactness and total metacompactness. **(80k:54032)**
Yajima, Yukinobu *See* **Tamano, Ken-ichi, (80k:54032)**

54Fxx Special properties

Nagami, Keio A glance at the dimension theory of the last quarter century. (Japanese) **80b:54043**

54F05 Ordered topological spaces, partially ordered spaces [See also 06B30, 06F30.]

Bennett, H. R. (*with* Lutzer, David J.) Ordered spaces with σ-minimal bases. **80j:54027**
Choe, Tae Ho (*with* Park, Young Soo) Characterizations of R-compact ordered spaces. **80c:54031**
Partially ordered topological spaces. **80k:54058**
(*with* Park, Young Soo) Embedding ordered topological spaces into topological semilattices. **80e:54041**
van Douwen, Eric K. Retracts of the Sorgenfrey line. **80i:54042**
(*with* Lutzer, David J.) On the classification of stationary sets. **80h:54038**
Fleischer, Isidore Paracompactness for ordered sums. **80a:54039**
Frankiewicz, Ryszard (*with* Kulpa, W.) On order topology of spaces having uniform linearly ordered bases. **80b:54036**
Kulpa, W. *See* **Frankiewicz, Ryszard, 80b:54036**
Lutzer, David J. *See* **van Douwen, Eric K., 80h:54038** *and* **Bennett, H. R., 80j:54027**
Park, Young Soo *See* **Choe, Tae Ho, 80c:54031** *and* **Choe, Tae Ho, 80e:54041**
van Wouwe, J. M. ★GO-spaces and generalizations of metrizability. **80m:54046**

Secondary classifications:

Adnadjević, Dušan Separation axioms and convergence in ordered bitopological spaces. (Russian. Georgian and English summaries) **(80m:54043)**
Andima, Susan J. (*with* Thron, W. J.) Order-induced topological properties. **(80a:54065)**
Behringer, Fred Alois Zur Existenz maximaler Werte bei quasiordnungswertigen Abbildungen. (English and French summaries) **(80m:54020)**
Bennett, H. R. Pixley-Roy spaces and Heath planes. **(80k:54009)**
Burgess, D. C. J. (*with* Fitzpatrick, M.) Locally convex syntopogenous spaces. **(80c:54002)**
Čertanov, G. I. *See* **Efimov, B. A., (80h:54040)**
Devlin, Keith J. (*with* Shelah, Saharon) Souslin properties and tree topologies. **(80m:54031)**
van Douwen, Eric K. (*with* Pfeffer, Washek F.) Some properties of the Sorgenfrey line and related spaces. **(80h:54027)**
Efimov, B. A. (*with* Čertanov, G. I.) Two properties of the Suslin continuum. (Russian) **(80h:54040)**
Fitzpatrick, M. *See* **Burgess, D. C. J., (80c:54002)**
Meyer, Paul R. (*with* Wilson, Richard G.) Cardinal functions on topological spaces satisfying order conditions. **(80e:54005)**
van Mill, Jan (*with* Schrijver, Alexander) Subbase characterizations of compact topological spaces. **(80d:54023)**
Pfeffer, Washek F. *See* **van Douwen, Eric K., (80h:54027)**
Schrijver, Alexander *See* **van Mill, Jan, (80d:54023)**
Semadeni, Zbigniew (*with* Zidenberg-Spirydonow, H.) Functors on categories of ordered topological spaces. **(80m:54016)**
Shelah, Saharon *See* **Devlin, Keith J., (80m:54031)**
Šimon, Petr Left-separated spaces: a comment to a paper "Bicompacta that are representable as the union of a countable number of left subspaces. I, II" (Russian), [Comment. Math. Univ. Carolin. **20** (1979), no. 2, 361–379, 381–395; MR 80e:54029] by M. G. Tkačenko. **(80m:54008)**
Simone, Joseph N. Continuous images of ordered compacta and hereditarily locally connected continua. **(80g:54028)**
Suslinian images of ordered compacta and a totally nonmetric Hahn-Mazurkiewicz theorem. (Serbo-Croatian summary) **(80c:54036)**
Thron, W. J. *See* **Andima, Susan J., (80a:54065)**
(Tkačenko, M. G.) *See* **Šimon, Petr, (80m:54008)**
Turinici, Mihai Maximal elements in partially ordered topological spaces and applications. **(80h:06007)**
Wilson, Richard G. *See* **Meyer, Paul R., (80e:54005)**
Zidenberg-Spirydonow, H. *See* **Semadeni, Zbigniew, (80m:54016)**
Zimmermann, Karel A generalization of convex functions. (Czech summary) **(80g:52002)**

54F15 Continua and generalizations

Bellamy, David P. (*with* Hagopian, Charles L.) Mapping continua onto their cones. **80m:54047**
Eberhart, Carl Intervals of continua which are Hilbert cubes. **80e:54042**
Gordh, G. R., Jr. (*with* Hughes, C. Bruce) On freely decomposable mappings of continua. (Serbo-Croatian summary) **80k:54059**
Hagopian, Charles L. *See* **Bellamy, David P., 80m:54047**
Hughes, C. Bruce *See* **Gordh, G. R., Jr., 80k:54059**
Krasinkiewicz, J. Shape properties of hyperspaces. **80b:54038**
Lau, August Y. W. Certain local homeomorphisms of continua are homeomorphisms. (Russian summary) **80a:54058**
Mandelkern, Mark An example in connectivity. **80b:54039**
Perevalov, G. E. The compactness of the set of plane continua of finite linear measure. (Russian) **80f:54025**

Secondary classifications:

Abo-Zeid, E. On σ-connected spaces. **(80d:54016)**
Petrus, Ann Contractibility of Whitney continua in $C(X)$. **(80a:54010)**
Simone, Joseph N. Continuous images of ordered compacta and hereditarily locally connected continua. **(80g:54028)**

54F20 Special types of continua

Abo-Zeid, E. Some properties of Whitney continua. **80k:54060**
Adu, David I. Connected CM-homomorphisms into semigroups of closed binary relations on hereditarily locally connected continua. **80d:54040**
Bellamy, David P. Indecomposable continua with one and two composants. **80e:54043**
Bennett, D. E. Expansive collections of continua. **80b:54040**
Čertanov, G. I. *See* **Efimov, B. A., 80h:54040**
Charatonik, Janusz J. A characterization of the pseudo-arc. (Russian summary) **80a:54059**
Czuba, Stanisław T. R-continua and contractibility of dendroids. (Russian summary) **80k:54061**
Efimov, B. A. (*with* Čertanov, G. I.) Two properties of the Suslin continuum. (Russian) **80h:54040**
Fugate, J. B. (*with* Mohler, L.) A note on fixed points in tree-like continua. **80k:54062**
Gordh, G. R., Jr. (*with* Lum, Lewis) Radially convex mappings and smoothness in continua. **80e:54044**
Grace, E. E. (*with* Vought, Eldon J.) Semi-confluent and weakly confluent images of tree-like and atriodic continua. **80c:54032**
Grispolakis, Joachim N. (*with* Tymchatyn, Edward D.) Continua which admit only certain classes of onto mappings. **80k:54063**
(*with* Tymchatyn, Edward D.) Embedding smooth dendroids in hyperspaces. **80j:54028**
(*with* Nadler, Sam B., Jr.; Tymchatyn, Edward D.) Some properties of hyperspaces with applications to continua theory. **80j:54029**
(*with* Tymchatyn, Edward D.) Hereditarily σ-connected continua. **80i:54043**
(*with* Tymchatyn, Edward D.) Weakly confluent mappings and the covering property of hyperspaces. **80d:54041**
Hadžiivanov, Nikolai G. The product of continua. (Russian) **80c:54033**
Hagopian, Charles L. Mapping theorems for plane continua. **80k:54064**
Hinrichsen, J. W. On filling an irreducible continuum with one point union of 2-cells. **80f:54026**
Ingram, W. T. Concerning atriodic tree-like continua. **80c:54034**
Hereditarily indecomposable tree-like continua. **80i:54044**
Krasinkiewicz, J. (*with* Minc, P.) Continua with countable number of arc-components. **80h:54041a**
(*with* Minc, P.) Continua and their open subsets with connected complements. **80h:54041b**
Lum, Lewis *See* **Gordh, G. R., Jr., 80e:54044**

Maćkowiak, Tadeusz Some examples of irreducibly confluent mappings. **80a:54060**
Continua irreducible about a closed set. (Russian summary) **80c:54035**
Maška, Roman On the characterization by Kuratowski of irreducible continua. (Russian summary) **80f:54027**
Misc, P. *See* **Krasinkiewicz, J., 80h:54041a** *and* **Krasinkiewicz, J., 80h:54041b**
Mohler, L. *See* **Fugate, J. B., 80k:54062**
Nadler, Sam B., Jr. *See* **Grispolakis, Joachim N.; et al., 80j:54029**
Oversteegen, Lex G. Noncontractibility of continua. (Russian summary) **80e:54045**
Rogers, James T., Jr. Almost everything you wanted to know about homogeneous, circle-like continua. **80k:54065**
Weakly confluent mappings and finitely-generated cohomology. **80m:54048**
Simone, Joseph N. Suslinian images of ordered compacta and a totally nonmetric Hahn-Mazurkiewicz theorem. (Serbo-Croatian summary) **80c:54036**
Tymchatyn, Edward D. *See* **Grispolakis, Joachim N., 80d:54041; Grispolakis, Joachim N., 80i:54043; Grispolakis, Joachim N., 80j:54028; Grispolakis, Joachim N.; et al., 80j:54029** *and* **Grispolakis, Joachim N., 80k:54063**
Vought, Eldon J. *See* **Grace, E. E., 80c:54032**
Wetzel, John E. Dissections of a simply-connected plane domain. **80d:54042**

Secondary classifications:

Eberhart, Carl (*with* Nadler, Sam B., Jr.) Hyperspaces of cones and fans. **(80i:54009)**
Grispolakis, Joachim N. (*with* Tymchatyn, Edward D.) A universal smooth dendroid. (Russian summary) **(80c:54040)**
Hughes, C. Bruce Some remarks on freely decomposable mappings. **(80j:54005)**
Koyama, Akira Note on quasi-domination in the sense of K. Borsuk. **(80b:54019)**
Maćkowiak, Tadeusz Some kinds of the unicoherence. **(80b:54046)**
Nadler, Sam B., Jr. A fixed point theorem for hyperspace suspensions. **(80d:54006)**
See also **Eberhart, Carl, (80i:54009)**
Tymchatyn, Edward D. *See* **Grispolakis, Joachim N., (80c:54040)**

54F25 Peano spaces and generalizations

Hoffmann, Burkhard An injective characterization of Peano spaces. **80m:54049**
Magill, K. D., Jr. (*with* Subbiah, S.) Semigroups with exactly three regular $\mathcal{D}$-classes. **80d:54043**
Simone, Joseph N. Concerning hereditarily locally connected continua. **80c:54037**
Subbiah, S. *See* **Magill, K. D., Jr., 80d:54043**

Secondary classifications:

Curtis, D. W. (*with* Schori, R. M.) Hyperspaces of Peano continua are Hilbert cubes. **(80k:54010)**
Growth hyperspaces of Peano continua. **(80a:54009)**
García-Máynez, A. *See* **Martínez T., Wilfrido, (80k:54071)**
Martínez T., Wilfrido (*with* García-Máynez, A.) Unicoherent plane Peano sets are σ-unicoherent. **(80k:54071)**
Schori, R. M. *See* **Curtis, D. W., (80k:54010)**

54F30 Cyclic elements

54F35 Higher dimensional local connectedness [See also 55Mxx, 55Nxx.]

54F40 Compact (locally compact) absolute neighborhood retracts

Kotanov, S. S. Strong mobility relative to a certain class of spaces and mappings. (Russian. Georgian and English summaries) **80g:54038**
Martin, John R. Absolute fixed-point sets in compacta. **80f:54028**

Secondary classifications:

Curtis, D. W. (*with* Kozlowski, G.) Brick decompositions and Q-manifolds. **(80d:57009)**
Kozlowski, G. *See* **Curtis, D. W., (80d:57009)**
Štepin, E. V. Tihonov manifolds. (Russian) **(80k:57027)**

54F43 Shape theory [See mainly 55P55, 57N25.]

Dydak, Jerzy On internally movable compacta. (Russian summary) **80f:54029**
Keesling, James The Stone-Čech compactification and shape dimension. **80j:54030**
Skordev, G. S. The shape of solenoidal spaces. (Russian) **80e:54046**
Kyoto *See* **Shape and infinite-dimensional manifolds, 80g:54039**
Manifolds *See* **Shape and infinite-dimensional manifolds, 80g:54039**
Shape and infinite-dimensional manifolds ★Shape and infinite-dimensional manifolds. (Japanese) **80g:54039**
Symposium:
Shape and Infinite-Dimensional Manifolds *See* **Shape and infinite-dimensional manifolds, 80g:54039**

Secondary classifications:

Cordier, Jean-Marc (*with* Porter, Timothy) Introduction à la théorie de la forme. I. **(80j:55012)**
Husch, Lawrence S. Stability theorem for shape equivalences. (Russian summary) **(80d:55013)**
Kodama, Y. (*with* Koyama, Akira) Hurewicz isomorphism theorem for Steenrod homology. **(80g:55005)**
Kotanov, S. S. Strong mobility relative to a certain class of spaces and mappings. (Russian. Georgian and English summaries) **(80g:54038)**
Koyama, Akira *See* **Kodama, Y., (80g:55005)**
Krasinkiewicz, J. Shape properties of hyperspaces. **(80b:54038)**
MacDonald, John L. Categorical shape theory and the back and forth property. **(80j:55013)**
Mardešić, Sibe Comparing fibres in a shape fibration. (Serbo-Croatian summary) **(80g:55021)**
Porter, Timothy *See* **Cordier, Jean-Marc, (80j:55012)**
Ungar, Š. n-connectedness of inverse systems and applications to shape theory. (Serbo-Croatian summary) **(80e:55023)**
Watanabe, Tadashi On spaces which have the shape of compact metric spaces. **(80f:54018)**

54F45 Dimension theory [See also 55M10.]

Addis, David F. (*with* Gresham, John H.) A class of infinite-dimensional spaces. I. Dimension theory and Alexandroff's problem. **80b:54041**
Assouad, Patrice Étude d'une dimension métrique liée à la possibilité de plongements dans $\mathbb{R}^n$. (English summary) **80f:54030**
Baković, Vlado Mappings of locally finite-dimensional spaces. (Russian) **80j:54031**
A classification of infinite-dimensional spaces. (Russian) **80c:54038**
Baladze, V. H. Dimensions modulo classes of spaces. (Russian. Georgian and English summaries) **80k:54066**
Čigogidze, A. Č. The dimension of completely regular spaces. (Russian. Georgian and English summaries) **80b:54042**
(*with* Pasynkov, B. A.) The dimension of products of completely regular spaces. (Russian. Georgian and English summaries) **80d:54044**
Fedorčuk, V. V. Infinite-dimensional bicompacta. (Russian) **80e:54047**
Filippov, V. V. (*with* Úry, L.) A theorem on relative universal spaces with given weight and dimension. **80h:54042**
The dimension of spaces with operation of a bicompact group. (Russian) **80f:54031**
Fora, Ali A. On the covering dimension of subspaces of product of Sorgenfrey lines. **80a:54062**
Gresham, John H. *See* **Addis, David F., 80b:54041**
Hadžiivanov, Nikolaĭ G. (*with* Hamamdžiev, A. L.) The infinite connection of normal expansions of the space Q^{ω}. (Russian) **80k:54043**
Cantor manifolds: (Russian) **80i:54045**
Hamamdžiev, A. L. *See* **Hadžiivanov, Nikolaĭ G., 80k:54043**
Janos, Ludvik Dimension theory via bisector chains. **80j:54032**
Dimension theory via reduced bisector chains. **80a:54061**
Kandil, A. The dimension of spaces of θ-proximity. (Russian) **80d:54045**
Klebanov, B. S. The sum theory for inductive dimensions. (Russian. English summary) **80c:54039**
Krivonosov, L. N. Two topological invariants of metrizable spaces and their connection with dimension. (Russian) **80d:54046**
Ljuksemburg, L. A. The transfinite dimension of metric spaces. (Russian) **80d:54047**
Luxemburg, Leonid On universal metric locally finite-dimensional spaces. **80h:54044**
Ormocadze, R. N. An inductive dimension and estimation of metric dimension. (Russian. Georgian and English summaries) **80d:54048**
Parfenov, P. G. The coincidence of the dimensions of absolutely normal bicompacta. (Russian) **80b:54044**
Pasynkov, B. A. *See* **Čigogidze, A. Č., 80d:54044**
Pol, Elżbieta On the dimension of the product of metrizable spaces. (Russian summary) **80f:54032**
Strongly metrizable spaces of large dimension each separable subspace of which is zero-dimensional. **80a:54063**
Some examples in the dimension theory of Tychonoff spaces. **80e:54048**
Przymusiński, Teodor C. On the dimension of product spaces and an example of M. Wage. **80f:54033**
Rubin, Leonard R. (*with* Schori, R. M.; Walsh, John J.) New dimension-theory techniques for constructing infinite-dimensional examples. **80e:54049**
Hereditarily strongly infinite-dimensional spaces. **80m:54050**
Schori, R. M. (*with* Walsh, John J.) Examples of hereditarily strongly infinite-dimensional compacta. **80m:54051**
See also **Rubin, Leonard R.; et al., 80e:54049**
Tomaszewski, B. On weakly n-dimensional spaces. **80k:54067**
Úry, L. *See* **Filippov, V. V., 80h:54042**
Wage, Michael L. The dimension of product spaces. **80a:54064**
Walsh, John J. Infinite-dimensional compacta containing no n-dimensional ($n > 1$) subsets. **80e:54050**
See also **Rubin, Leonard R.; et al., 80e:54049** *and* **Schori, R. M., 80m:54051**
Zambahidze, L. G. Some relations between the dimensions of normal spaces and their subspaces of a special kind. (Russian. Georgian and English summaries) **80k:54068**

Secondary classifications:

Aleksandrov, P. S. ★Избранные труды. (Russian) [Selected works] **(80j:01040)**
Bryant, J. L. *See* **Cannon, J. W.; et al., (80h:57026)**
Bázási, Svetlana Nagata's metric for uniformities. (Russian summary) **(80f:54021)**
Cannon, J. W. (*with* Bryant, J. L.; Lacher, R. C.) The structure of generalized manifolds having nonmanifold set of trivial dimension. **(80h:57026)**
Čigogidze, A. Č. The Uryson-Menger inequality. (Russian. Georgian and English summaries) **(80i:54022)**
Gorelik, G. E. The dimension of space based on the metric. (Russian) **(80d:03084)**
Hadžiivanov, Nikolaĭ G. The product of continua. (Russian) **(80c:54033)**
Haver, William E. A near-selection theorem. **(80c:54015)**
Hoshina, Takao (*with* Morita, Kiiti) On rectangular products of topological spaces. **(80k:54006)**
Johnson, Dale M. The problem of the invariance of dimension in the growth of modern topology. I. **(80k:01034)**
(Kolmogorov, A. N.) *See* **Aleksandrov, P. S., (80j:01040)**
Lacher, R. C. *See* **Cannon, J. W.; et al., (80h:57026)**
Lisica, Ju. T. Obstructions to the extension of mappings. (Russian) **(80g:54017)**
(Mal'cev, A. A.) *See* **Aleksandrov, P. S., (80j:01040)**
Morita, Kiiti *See* **Hoshina, Takao, (80k:54006)**

Nowak, Sławomir Some remarks concerning the fundamental dimension of the Cartesian product of two compacta. (80h:55001)
Ormoecadze, R. N. Behavior of some classes of spaces and the dimension under continuous mappings. (Russian. Georgian and English summaries) (80f:54014)
(Pontrjagin, L. S.) *See* Aleksandrov, P. S., (80j:01040)
Rajagopalan, M. Scattered spaces. III. (80c:54044)
(Tihonov, A. N.) *See* Aleksandrov, P. S., (80j:01040)
Yajima, Yukinobu On the order star-finite and closure-preserving covers. (80e:54023)

54F50 Spaces of dimension ≤ 1; curves, dendrites [See also 26A03.]

Grispolakis, Joachim N. (*with* Tymchatyn, Edward D.) A universal smooth dendroid. (Russian summary) 80c:54040
Maćkowiak, Tadeusz Monotone retracts of an arcwise connected continuum. 80h:54045
Muenzenberger, T. B. (*with* Smithson, R. E.) Semilattice structures on dendritic spaces. 80k:54069
Oversteegen, Lex G. Fans and embeddings in the plane. 80m:54052
Pearson, B. J. Dendritic decompositions of generalized simple closed curves. 80c:54041
Smithson, R. E. *See* Muenzenberger, T. B., 80k:54069
Tymchatyn, Edward D. *See* Grispolakis, Joachim N., 80c:54040
Zarembo, D. On orthogonal families in the plane. 80g:54040

Secondary classifications:

Bellamy, David P. Tree-likeness and the fixed-point property. (80c:54052)
Eberhart, Carl (*with* Nadler, Sam B., Jr.) Hyperspaces of cones and fans. (80f:54009)
Grace, E. E. (*with* Vought, Eldon J.) Semi-confluent and weakly confluent images of tree-like and atriodic continua. (80c:54032)
Ingram, W. T. Concerning atriodic tree-like continua. (80c:54034)
Nadler, Sam B., Jr. *See* Eberhart, Carl, (80f:54009)
Oversteegen, Lex G. Noncontractibility of continua. (Russian summary) (80e:54045)
Vought, Eldon J. *See* Grace, E. E., (80c:54032)

54F55 Unicoherence, multicoherence

Charatonik, Janusz J. (*with* Grabowski, Z.) Homotopically fixed arcs and the contractibility of dendroids. 80c:54042
Cvid, S. F. A countable strongly unicoherent space. (Russian) 80b:54045
García-Máynez, A. On σ-unicoherence. 80h:54070
See also Martínez T., Wilfrido, 80h:54071
Grabowski, Z. *See* Charatonik, Janusz J., 80c:54042
Maćkowiak, Tadeusz Some kinds of the unicoherence. 80b:54046
Martínez T., Wilfrido (*with* García-Máynez, A.) Unicoherent plane Peano sets are σ-unicoherent. 80h:54071

Secondary classifications:

Maška, Roman On the characterization by Kuratowski of irreducible continua. (Russian summary) (80f:54027)

54F60 Maps into S_n

Secondary classifications:

Lisica, Ju. T. Obstructions to the extension of mappings. (Russian) (80g:54017)

54F62 Periodic maps

Ritter, Gerhard X. A characterization of almost periodic homeomorphisms on the 2-sphere and the annulus. 80k:54072

54F65 Topological characterizations of particular spaces

Ho, Chung Wu On the local homogeneity and the invertibility of a topological space. 80b:54047

Secondary classifications:

Balkirov, A. I. Maximal almost disjoint systems and Franklin bicompacta. (Russian) (80m:54032)
Curtis, D. W. Hyperspaces homeomorphic to Hilbert space. (80d:54007)
van Douwen, Eric K. (*with* van Mill, Jan) Parovičenko's characterization of $\beta\omega - \omega$ implies CH. (80b:04007)
Retracts of the Sorgenfrey line. (80i:54042)
van Mill, Jan *See* van Douwen, Eric K., (80b:04007)

54F99 None of the above, but in this section

Andima, Susan J. (*with* Thron, W. J.) Order-induced topological properties. 80a:54065
Grispolakis, Joachim N. (*with* Tymchatyn, Edward D.) Semi-confluent mappings and acyclicity. 80c:54051
Thron, W. J. *See* Andima, Susan J., 80a:54065
Tymchatyn, Edward D. *See* Grispolakis, Joachim N., 80c:54051

54Gxx Peculiar spaces

54G05 Extremally disconnected spaces, *F*-spaces, etc.

Malyhin, V. I. The structure of the inverse image of a point of a space under the natural mapping of the absolute of the inverse image onto the point. (Russian) 80g:54041
Mrówka, Hasan *n*-absolutes of regular spaces. (Russian) 80g:54042
Murphy, Thomas N. A criterion for the existence of *P*-points. (French summary) 80a:54066
Porter, Jack R. (*with* Woods, R. Grant) Minimal extremally disconnected Hausdorff spaces. 80c:54043
Woods, R. Grant *See* Porter, Jack R., 80c:54043

Secondary classifications:

van Douwen, Eric K. (*with* van Mill, Jan) Parovičenko's characterization of $\beta\omega - \omega$ implies CH. (80b:04007)
Malyhin, V. I. βN is prime. (Russian summary) (80f:54027)
Mathur, Asha A note on *S*-closed spaces. (80e:54024)
van Mill, Jan *See* van Douwen, Eric K., (80b:04007)
Pavlovskiĭ, D. S. Absolutes of continuous mappings. (Russian. English summary) (80f:54015)

54G10 *P*-spaces

Secondary classifications:

Auli, Charles E. Absolute C^*-embedding of *P*-spaces. (Russian summary) (80a:54022)

54G15 Pathological spaces

Lewis, Wayne Stable homeomorphisms of the pseudo-arc. 80m:54053
Ul'janov, V. M. A space with a single point of extremal disconnectedness. (Russian) 80a:54067

Secondary classifications:

Balkirov, A. I. Maximal almost disjoint systems and Franklin bicompacta. (Russian) (80m:54032)
Roitman, Judy A reformulation of *S* and *L*. (80j:54016)

54G20 Counterexamples

Davis, S. W. A nondevelopable Čech-complete space with a point-countable base. 80i:54046
Heldermann, N. C. On a conjecture of Domiaty and Jaritz. (Serbo-Croatian summary) 80h:54046
Rajagopalan, M. Scattered spaces. III. 80c:54044

Secondary classifications:

Bell, Murray G. A normal first countable ccc nonseparable space. (80e:54021)
Berner, Andrew J. Generalizations of quasi-*k* spaces. (80f:54031)
Button, Robert Warren A note on the *Q*-topology. (80a:54096)
Davies, Peter Nonperfect spaces with point-countable bases. (80j:54024)
Hoffmann, Rudolf-E. Topological spaces admitting a "dual". (80j:54001)
Lewis, Wayne Stable homeomorphisms of the pseudo-arc. (80m:54053)
Mandelkern, Mark An example in connectivity. (80b:54039)
Martin, John R. (*with* Nadler, Sam B., Jr.) Examples and questions in the theory of fixed-point sets. (80m:54059)
Nadler, Sam B., Jr. *See* Martin, John R., (80m:54059)
Neubrunn, Tibor Erratum: "A note on mappings of Baire spaces" (Math. Slovaca 27 (1977), no. 2, 173–176). (80e:54017)
Przymusiński, Teodor C. Topological properties of product spaces and the notion of *n*-cardinality. (80k:54008)
On the dimension of product spaces and an example of M. Wage. (80f:54033)
Roitman, Judy A reformulation of *S* and *L*. (80j:54016)
Rudin, Mary Ellen Pixley-Roy and the Souslin line. (80c:54030)
Willmott, Richard Countable yet nowhere first countable. (80c:54006)

54G99 None of the above, but in this section

Atalla, Robert E. Measure theoretic behavior of closed sets. 80a:54068

Secondary classifications:

Haraszlivili, A. B. The Banach-Tarski paradox. (Russian. Georgian and English summaries) (80i:04005)

54Hxx Connections with other structures, applications

Secondary classifications:

Sanghvi, Arun P. Convergence of successive approximations to a stochastic fixed point. (80m:60087)

54H05 Descriptive set theory (topological aspects of Borel, analytic, projective, etc. sets) [See also 03E15, 04A15, 26A21, 28A05.]

Dellacherie, Claude Correction à: "Un crible généralisé" (Séminaire de Probabilités, VII (Univ. Strasbourg, Strasbourg, année universitaire 1971–1972), pp. 33–35, Lecture Notes in Math., Vol. 321, Springer, Berlin, 1973). 80e:54052
Filippov, V. P. *See* Kozlova, Z. I., 80e:54053a *and* Kozlova, Z. I., 80e:54053b
Kozlova, Z. I. (*with* Filippov, V. P.) Classes of projective sets of certain topological spaces of uncountable weight. I. (Russian) 80e:54053a
(*with* Filippov, V. P.) Classes of projective sets of certain topological spaces of uncountable weight. II. (Russian) 80e:54053b
Lorch, E. R. (*with* Tong, Hing) On the automorphisms of the group of Baire

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Mauldin, R. Daniel Borel parametrizations. **80j:54033**
Pol, Roman *See* **Rao, K. P. S. Bhaskara, 80a:54069**
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Rice, Michael D. Uniformities in the descriptive theory of sets. II. Measurable functions. **80g:54043**
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van Douwen, Eric K. (*with* Lutzer, David J.) On the classification of stationary sets. **(80b:54038)**
Feiste, Uwe A characterization of a certain class of compact metric spaces. **(80f:54014)**
Flachsmeyer, Jürgen (*with* Lotz, Siegfried) A survey on hyperdiffuse measures. I. **(80i:28028)**
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Louveau, Alain Recursivity and compactness. **(80j:03071)**
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Stone, A. H. *See* **Maharam, Dorothy, (80k:54007)**
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Tall, Franklin D. Applications of a generalized Martin's axiom. **(80b:03087)**

54H10 Topological representations of algebraic systems [See also 22–XX.]

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Wroński, Stanisław On fields of sets with a nowhere dense boundary. **(80m:06015)**

54H12 Topological lattices, etc. [See also 06B30, 06F30.]

Benderskiĭ, O. Ja. Interior topologies in l-groups and K-lineals. (Russian. English summary) **80i:54047**
Chajda, Ivan (*with* Zelinka, Bohdan) Metrics and tolerances. **80a:54070**
Hofmann, Karl Heinrich (*with* Lawson, Jimmie D.) The spectral theory of distributive continuous lattices. **80c:54045**
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Zelinka, Bohdan *See* **Chajda, Ivan, 80a:54070**

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Clinkenbeard, Dennis J. Simple compact topological lattices. **(80k:06005)**
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Veksler, A. I. (*with* Koldunov, A. V.) Sequential majorizability in vector lattices. (Russian) **(80g:54019)**
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54H13 Topological fields, rings, etc. {For algebraic aspects, see 12Jxx, 13Jxx, 16A80.}

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54H15 Transformation groups and semigroups [See also 20M20, 22–XX, 57Sxx.]

Baird, Bridget B. Inverse semigroups of homeomorphisms are Hopfian. **80b:54047**
Bronšteĭn, I. U. ★Extensions of minimal transformation groups. **80j:54034**
Burdujan, Ilie Une note sur un théorème de S. N. Hudson. (Romanian summary) **80a:54071**
Edmonds, Allan L. (*with* Fintushel, Ronald) Topological singular circle fiberings. **80a:54072**
Fintushel, Ronald *See* **Edmonds, Allan L., 80a:54072**
Hauptman, Herbert The extension concept and its role in the probabilistic theory of the structure semivariants. **80k:54073**
Junghenn, H. D. Almost periodic functions on semidirect products of transformation semigroups. **80i:54048**
Magill, K. D., Jr. Green's $\mathcal{J}$-relation for polynomials. **80a:54073**
Parker, G. Edgar Semigroups of continuous transformations and generating inverse limit sequences. **80k:54048**
de Vries, J. The local weight of an effective locally compact transformation group and the dimension of $L^2(G)$. **80b:54049**
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van der Woude, J. C. S. P. ★Disjointness and classes of minimal transformation groups. **80f:54036**
Zubov, S. V. The stability of periodic motion. (Russian) **80f:54037**

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Glasner, Shmuel Almost periodic sets and measures on the torus. **(80f:54038)**
Hyb, Wojciech On some minimal transformations of compact spaces. **(80a:54013)**
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Marchetto, D. Stepanoff flows on orientable surfaces. **(80d:58058)**
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54H20 Topological dynamics [See also 28Dxx, 34C35, 58Fxx.]

Ahmad, Shair (*with* Sarabia, José) On nonwandering continuous flows. **80m:54054**
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54H25 Fixed-point and coincidence theorems [See also 47H10, 55M20.]

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Bellamy, David P. Tree-likeness and the fixed-point property. 80c:54052
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Some common fixed-point theorems. 80k:54080
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Ćirić, Ljubomir B. On common fixed points in uniform spaces. 80a:54079
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Fisher, Brian A fixed-point mapping. 80m:54056
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A fixed-point theorem for compact metric spaces. 80c:54054
A note on a theorem of Khan. (Italian summary) 80g:54053
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Guénard, François Caractérisations des contractions dans les espaces uniformes séquentiellement complets. (English summary) 80c:54055
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Gupta, K. P. On a fixed point theorem in a quasi-gauge function space having two different quasigauge structures. (Hindi. English summary) 80a:54082
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Harinath, K. S. A chain of results on fixed points. 80k:54083
Heikkilä, Seppo (*with* Seikkala, Seppo) On fixed points in uniform spaces with applications to probabilistic metric spaces. 80d:54056
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Lee, Cheng-Ming An existence theorem via an intuitive idea and fixed-point theorems. 80h:54061
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Mas-Colell, Andreu A selection theorem for open graph correspondences with star-shaped values. 80e:54059
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Puiu, Gabriel *See* **Popa, Valeriu; et al., 80a:54087**
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Rosen, Harvey Fixed points of sequences of locally expansive maps. **80a:54091**
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Singh, Shaligram (*with* Singh, Uday Narayan) A generalized fixed-point theorem. **80k:54089**
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Janicka, Renata (*with* Kaczor, Wiesława) On the construction of some measures of noncompactness. (Polish and Russian summaries) **(80a:47107)**
Kaczor, Wiesława *See* **Janicka, Renata, (80a:47107)**
Kneis, Gert Contributions to the theory of pseudo-uniform spaces. **(80f:54034)**
Ko, Hwei Mei (*with* Ts'ai, Yüeh Hsia) Fixed-point theorems for point-to-set mappings in locally convex spaces and characterizations of complete metric spaces. **(80m:47056)**
Le Dung Muu *See* **Hoàng Tuỵ; et al., (80f:90119)**
Lee, Cheng-Ming (*with* Tan, Kok Keong) On Fan's extensions of Browder's fixed point theorems for multi-valued inward mappings. **(80b:47076)**
Machado, Hilton V. Convergence of successive approximations—nonexpansive mappings. **(80f:47076)**
Martin, John R. Absolute fixed-point sets in compacta. **(80f:54028)**
Mauh, Samuel On the fixed point index and the Nielsen fixed point theorem of symmetric product mappings. **(80f:55002)**
Mather, John N. Area preserving twist homeomorphism of the annulus. **(80k:58068)**
Mohler, L. *See* **Fugate, J. B., (80k:54062)**
Nadler, Sam B., Jr. A fixed point theorem for hyperspace suspensions. **(80d:54006)**
Naik, K. Viswanatha A note on a theorem of Ray and Singh. **(80f:47080)**
Nguyen Van Thoai *See* **Hoàng Tuỵ; et al., (80f:90119)**
Reich, Simeon Fixed point theorems for set-valued mappings. **(80k:47045)**
Rival, Ivan *See* **Duffus, Dwight, (80j:06003)**
Roberts, Jean E. A stronger Borsuk-Ulam type theorem for proper Z_p-actions on mod p homology n-spheres. **(80a:55001)**
Saigal, R. (*with* Todd, Michael J.) Efficient acceleration techniques for fixed point algorithms. **(80c:65013)**
Singh, Sankatha P. Application of fixed point theorems in approximation theory. **(80j:41043)**
Tan, Kok Keong *See* **Lee, Cheng-Ming, (80b:47076)**
Timchev, A. V. Some fixed-point theorems. (Russian) **(80b:90048)**
Todd, Michael J. *See* **Saigal, R., (80c:65013)**
Ts'ai, Yüeh Hsia *See* **Ko, Hwei Mei, (80m:47056)**
van de Vel, M. Superextensions and Lefschetz fixed-point structures. **(80f:54033)**
Volovikov, A. Ju. Generalization of the Borsuk-Ulam theorem. (Russian) **(80k:55008)**
Yahya, Q. A. M. M. Fermat's last theorem—a topological verification. **(80f:10018)**

54H99 None of the above, but in this section

Dumitrescu, Camelia (*with* Vianu, Victor) The topological learning space. (Romanian. English summary) **80f:54060**
Sultanbekov, F. F. Regular functions of a triangle. (Russian) **80g:54057**
Vianu, Victor *See* **Dumitrescu, Camelia, 80f:54060**

Secondary classifications:

Feĭzullaev, R. B. *See* **Mustafaev, L. G., (80g:20086)**
Gregorius, Hans-Rolf (*with* Ziehe, Martin) Iterations of continuous mappings on metric spaces. Asymptotic stability and Lyapunov functions. **(80k:54010)**
Ledrappier, François A variational principle for the topological conditional entropy. **(80j:54011)**
Mankiewicz, Piotr Fat equicontinuous groups of homeomorphisms of linear topological spaces and their application to the problem of isometries in linear metric spaces. **(80g:46004)**
Mustafaev, L. G. (*with* Feĭzullaev, R. B.) A semiheap of locally topological mappings. (Russian) **(80g:20086)**
Ziehe, Martin *See* **Gregorius, Hans-Rolf, (80k:54010)**

54J05 Nonstandard topology [See also 03Hxx.]

Button, Robert Warren A note on the Q-topology. **80a:54096**
Gonshor, Harry An application of nonstandard analysis to category theory. **80k:54090**
Haddad, Labib Comments on nonstandard topology. **80f:54049**
Herrmann, Robert A. The productivity of generalized perfect maps. **80d:54062**
Convergence spaces and nonstandard compactifications. **80g:54058**
Wattenberg, Frank Nonstandard analysis and the theory of shape. **80c:54057**

Secondary classifications:

Edgar, G. A. Three cryptoisomorphism theorems. **(80c:54001)**
Grainger, Arthur D. Finite points of filters in infinite-dimensional vector spaces. **(80k:46008)**

55-XX ALGEBRAIC TOPOLOGY

55-01 Elementary exposition, textbooks

Harzheim, Egbert ★Einführung in die kombinatorische Topologie. **80k:55001**

Secondary classifications:

Heath, Philip R. ★An introduction to homotopy theory via groupoids and universal constructions. **(80g:55010)**

55-02 Advanced exposition (research surveys, monographs, etc.)

Adams, John Frank ★Infinite loop spaces. **80d:55001**
Browder, William (*with* Hsiang, Wu Chung) Some problems on homotopy theory manifolds and transformation groups. **80e:55001**
Hsiang, Wu Chung *See* **Browder, William, 80e:55001**
Whitehead, George W. ★Elements of homotopy theory. **80b:55001**

Secondary classifications:

Dydak, Jerzy (*with* Segal, Jack) ★Shape theory. **(80k:54020)**
Segal, Jack *See* **Dydak, Jerzy, (80k:54020)**

55-03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

(Gauss, Carl Friedrich) *See* **Țarină, M., (80m:01037)**
Mdzinarishvili, L. D. Functional homology. (Russian. English summary) **(80g:55009)**
Țarină, M. Carl Friedrich Gauss (1777–1855) as a precursor of the topology. **(80m:01037)**

55-04 Explicit machine computation and programs (not the theory of computation or programming)

Secondary classifications:

Gati, Georg Lower bounds for tree isomorphism problems by algebraic topology. **(80e:68104)**

55–06 Proceedings, conferences, etc.

(Hoffman, Peter) *See* **Algebraic topology, 80b:55002** *and* **Algebraic topology, 80k:55002**
(Picciniai, Renzo A.) *See* **Algebraic topology, 80b:55002**
(Sjerve, Denis) *See* **Algebraic topology, 80b:55002**
(Smith, Victor P.) *See* **Algebraic topology, 80k:55002**
Algebraic topology ★Algebraic topology. **80b:55002**
★Algebraic topology, Waterloo, 1978. **80k:55002**
Conference:
Algebraic Topology *See* **Algebraic topology, 80b:55002** *and* **Algebraic topology, 80k:55002**
Equivariant homotopy theory ★Equivariant homotopy theory. (Japanese) **80e:55002**
Homotopy theory *See* **Equivariant homotopy theory, 80e:55002**
Kyoto *See* **Equivariant homotopy theory, 80e:55002**
Symposium:
Equivariant Homotopy Theory *See* **Equivariant homotopy theory, 80e:55002**
Topology *See* **Algebraic topology, 80b:55002** *and* **Algebraic topology, 80k:55002**
Vancouver, B.C. *See* **Algebraic topology, 80b:55002**
Waterloo, Ont. *See* **Algebraic topology, 80k:55002**

Secondary classifications:

(Forster, Walter) *See* **Numerical solution of highly nonlinear problems, (80k:65010)**
(Peitgen, Heinz-Otto) *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
(Walther, Hans-Otto) *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Approximation of fixed points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Bonn *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Complementarity problems *See* **Numerical solution of highly nonlinear problems, (80k:65010)**
Conference:
Functional Differential Equations and Approximation of Fixed Points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Fixed point algorithms *See* **Numerical solution of highly nonlinear problems, (80k:65010)**
Functional differential equations and approximation of fixed points ★Functional differential equations and approximation of fixed points. **(80g:00005)**
Nonlinear problems *See* **Numerical solution of highly nonlinear problems, (80k:65010)**
Numerical solution of highly nonlinear problems ★Numerical solution of highly nonlinear problems. **(80k:65010)**
Southampton *See* **Numerical solution of highly nonlinear problems, (80k:65010)**
Summer School:
Functional Differential Equations and Approximation of Fixed Points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Symposium:
Fixed Point Algorithms and Complementarity Problems *See* **Numerical solution of highly nonlinear problems, (80k:65010)**

55Mxx Classical topics {For the topology of Euclidean spaces and manifolds, see 57N05, 57N10, 57N15.}

55M05 Duality

Martini, Franca An extension of Poincaré's duality theorem. (Italian. English summary) **80f:55001**

Secondary classifications:

Alexander, J. C. The topological theory of an embedding method. **(80a:58005)**

55M10 Dimension theory [See also 54F45.]

Nowak, Sławomir Some remarks concerning the fundamental dimension of the Cartesian product of two compacta. **80k:55001**

Secondary classifications:

Keesling, James The Stone-Čech compactification and shape dimension. **(80j:54030)**

55M15 Absolute neighborhood retracts [See also 54C55, 54F40.]

Secondary classifications:

Singh, Sukhjit A linking axiom and retracts. (Russian summary) **(80g:54022)**

55M20 Fixed points and coincidences [See also 54H25.]

tom Dieck, Tammo (*with* Smith, Larry) On coincidence points of maps from manifolds to spheres. **80k:55002**
Glesmann, Ernst Günter Product formulas for Nielsen numbers of mappings in bundles. (Russian) **80g:55001**
Glover, Henry (*with* Homer, William D.) Endomorphisms of the cohomology ring of finite Grassmann manifolds. **80e:55003**
Golbus, Bruce F. (*with* Kim, Soon Kyu; Pak, Jingyal) On the Nielsen numbers of fiber-preserving maps. **80k:55003**
Górniewicz, Lech (*with* Skordev, G. S.) Coincidence of continuous mappings. (Russian) **80e:55004**
Fixed point theorems for multivalued maps of subsets of Euclidean spaces. (Russian summary) **80g:55002**
(*with* Peitgen, Heinz-Otto) Degeneracy, nonejective fixed points and the fixed point index. **80k:55004**
Homer, William D. *See* **Glover, Henry, 80e:55003**
Kim, Soon Kyu *See* **Golbus, Bruce F.; et al., 80k:55003**
Leschinger, Karl Über Fixpunkte holomorpher Automorphismen. (English summary) **80e:55005**
Mas-Colell, Andreu Homeomorphisms of compact, convex sets and the Jacobian matrix. **80k:55005**
Masih, Samuel On the fixed point index and the Nielsen fixed point theorem of symmetric product mappings. **80f:55002**
Meyerson, Mark D. (*with* Wright, Alden H.) A new and constructive proof of the Borsuk-Ulam theorem. **80e:55006**
Milnor, John Analytic proofs of the "hairy ball theorem" and the Brouwer fixed-point theorem. **80m:55001**
Nakaoka, Minoru Equivariant point theorems for involutions. **80j:55001**
Equivariant point theorems. **80k:55006**
Olędzki, Juliusz On a generalization of the Borsuk-Ulam theorem on antipodes. (Russian summary) **80e:55007**
Pak, Jingyal *See* **Golbus, Bruce F.; et al., 80k:55003**
Peitgen, Heinz-Otto (*with* Prüfer, Michael) The Leray-Schauder continuation method is a constructive element in the numerical study of nonlinear eigenvalue and bifurcation problems. **80k:55007**
See also **Górniewicz, Lech, 80k:55004**
Prüfer, Michael *See* **Peitgen, Heinz-Otto, 80k:55007**
Roberts, Jean E. A stronger Borsuk-Ulam type theorem for proper Z_p-actions on mod p homology n-spheres. **80a:55001**
Salgal, R. On piecewise linear approximations to smooth mappings. **80j:55002**
Skordev, G. S. *See* **Górniewicz, Lech, 80e:55004**
Smith, Larry *See* **tom Dieck, Tammo, 80k:55002**
Volovikov, A. Ju. Generalization of the Borsuk-Ulam theorem. (Russian) **80k:55008**
Worosz, Theophil J. Multiple-valued functions and their application to the fixed point properties of product spaces. **80j:55003**
Wright, Alden H. *See* **Meyerson, Mark D., 80e:55006**

Secondary classifications:

Chow, Shui Nee (*with* Mallet-Paret, John; Yorke, James A.) A homotopy method for locating all zeros of a system of polynomials. **(80k:58012)**
Drexler, F. J. A homotopy method for the calculation of all zeros of zero-dimensional polynomial ideals. **(80f:58009)**
Dugundji, J. (*with* Granas, Andrzej) KKM maps and variational inequalities. **(80d:54015)**
Eisenack, Günther (*with* Fenske, Christian) ★Fixpunkttheorie. **(80g:58001)**
Fenske, Christian *See* **Eisenack, Günther, (80g:58001)**
Feshbach, Mark The transfer and compact Lie groups. **(80k:55049)**
Forster, Walter Recent developments in fixed point algorithms. **(80e:90092)**
Garcia, C. B. (*with* Gould, F. J.) A theorem on homotopy paths. **(80k:58011)**
Gould, F. J. *See* **Garcia, C. B., (80k:58011)**
Granas, Andrzej *See* **Dugundji, J., (80d:54015)**
Halpern, Benjamin A general coincidence theory. **(80e:54056)**
Hoàng Tuy A short self-contained algorithmic proof of Brouwer's fixed point theorem. **(80k:90039)**
Pivotal methods for computing equilibrium points: unified approach and new restart algorithm. **(80f:90147)**
Jeggle, Hansgeorg ★Nichtlineare Funktionalanalysis. **(80k:47057)**
Kaplan, James L. (*with* Yorke, James A.) Numerical solution of a generalized eigenvalue problem for even mappings. **(80k:47078)**
Mallet-Paret, John *See* **Chow, Shui Nee; et al., (80k:58012)**
(Peitgen, Heinz-Otto) *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Salgal, R. (*with* Shin, Y. S.) Perturbations in fixed point algorithms. **(80j:65020)**
Seydel, Rüdiger Numerical computation of branch points in nonlinear equations. **(80m:65044)**
Shin, Y. S. *See* **Salgal, R., (80j:65020)**
Šul'man, V. S. A fixed-point theorem. (Russian) **(80d:54061)**
Tarafdar, E. A remark on coincidence degree theory. (Italian summary) **(80k:47076)**
(*with* Teo, Suat Khoh) On the existence of solutions of the equation $Lx \in Nx$ and a coincidence degree theory. **(80m:47062)**
Teo, Suat Khoh *See* **Tarafdar, E., (80m:47062)**
(Walther, Hans-Otto) *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Watson, Layne T. Solving the nonlinear complementarity problem by a homotopy method. **(80h:65035)**
Yorke, James A. *See* **Kaplan, James L., (80k:47078)** *and* **Chow, Shui Nee; et al., (80k:58012)**
Approximation of fixed points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Bonn *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Conference:
Functional Differential Equations and Approximation of Fixed Points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**
Functional differential equations and approximation of fixed points ★Functional differential equations and approximation of fixed points. **(80g:00005)**

Summer School:
Functional Differential Equations and Approximation of Fixed Points *See* **Functional differential equations and approximation of fixed points, (80g:00005)**

55M25 Degree, winding number

Alexander, J. C. The additive inverse eigenvalue problem and topological degree. **80a:55002**
Arima, Naohiko *See* **Kojima, Masakazu; et al., 80g:55003**
Bourgin, D. G. Some problems, conjectures and methods in analysis. **80k:55009**
Chow, Shui Nee (*with* Mallet-Paret, John; Yorke, James A.) Finding zeroes of maps: homotopy methods that are constructive with probability one. **80d:55002**
Isnard, Carlos Augusto S. The Brouwer degree. (Portuguese) **80k:55010**
Jakubowski, Tadeusz Generalized Brouwer's degree. (Russian summary) **80f:55003**
Kearfott, Baker A summary of recent experiments to compute the topological degree. **80h:55003**
Kojima, Masakazu (*with* Nishino, Hisakazu; Arima, Naohiko) A PL homotopy for finding all the roots of a polynomial. **80g:55003**
Mallet-Paret, John *See* **Chow, Shui Nee; et al., 80d:55002**
Maxwell, Charles N. The degree of multiple-valued maps of spheres. **80f:55004**
Nishino, Hisakazu *See* **Kojima, Masakazu; et al., 80g:55003**
Pak, Jingyal On the fiber-preserving maps. **80c:55001**
Prüfer, Michael (*with* Siegberg, Hans Willi) On computational aspects of topological degree in $\mathbf{R}^n$. **80k:55011**
Siegberg, Hans Willi *See* **Prüfer, Michael, 80k:55011**
Stynes, Martin A simplification of Stenger's topological degree formula. **80m:55002**
Watson, Layne T. Fixed points of C^2 maps. **80c:55002**
Yorke, James A. *See* **Chow, Shui Nee; et al., 80d:55002**

Secondary classifications:

Alexander, J. C. Matrices, eigenvalues, and complex projective space. **(80a:15009)**
Numerical continuation methods and bifurcation. **(80k:58036)**
Bobylev, N. A. An approximation method for introducing rotation for certain classes of continuous vector fields. (Russian) **(80j:47065)**
Dybov, G. P. Introduction of rotation for a class of many-valued operators. (Russian) **(80k:47063)**
Eisenack, Günther (*with* Fenske, Christian) ★Fixpunkttheorie. **(80g:58001)**
Eisenberg, Murray (*with* Guy, Robert) A proof of the hairy ball theorem. **(80i:57018)**
Fenske, Christian *See* **Eisenack, Günther, (80g:58001)**
Frum-Ketkov, R. L. Mappings in a Banach space. (Russian) **(80f:47048)**
Granger, Jean-Michel Sur le degré local d'un germe d'application analytique réelle. (English summary) **(80c:32008a)**
Guy, Robert *See* **Eisenberg, Murray, (80i:57018)**
Harzheim, Egbert ★Einführung in die kombinatorische Topologie. **(80k:55001)**
Keller, Herbert B. Global homotopies and Newton methods. **(80f:65059)**
Lloyd, N. G. Remarks on generalising Rouché's theorem. **(80m:32029)**
Mawhin, Jean ★Topological degree methods in nonlinear boundary value problems. **(80c:47055)**
Prüfer, Michael Calculating global bifurcation. **(80g:65058)**
Riedrich, Thomas Nonlinear operator equations in topological vector spaces. **(80c:47048)**
Shih, Weishu Une remarque sur les équations aux dérivées partielles. (English summary) **(80b:58058)**
Zelins'kiĭ, Ju. B. Application of a local degree to the study of quasi-interior mappings. (Russian) **(80b:58011)**

55M30 Ljusternik-Schnirelman (Šnirel'man) category of a space

James, I. M. On category, in the sense of Lusternik-Schnirelmann. **80i:55001**
Moran, D. A. Corrigendum et addendum ad: "Minimal cell coverings of sphere bundles over spheres" [Comment. Math. Univ. Carolin. **16** (1975), 147–149; MR **51** #1834]. **80m:55003**
Sieghof, Wilhelm Generalized higher order cohomology operations induced by the diagonal mapping. **80a:55003**
Minimal coverings of manifolds with balls. **80k:55012**

55M35 Finite groups of transformations (including Smith theory) [See also 57S17.]

Dotzel, Ronald M. A converse of the Borel formula. **80g:55004**
Enos, H. C. A counterexample in finite fixed point theory. **80f:55005**
Jackowski, Stefan The Euler class and periodicity of group cohomology. **80a:55004**

Secondary classifications:

Brown, A. L. The Borsuk-Ulam theorem and orthogonality in normed linear spaces. **(80j:46038)**
Roberts, Jean E. A stronger Borsuk-Ulam type theorem for proper Z_p-actions on mod p homology n-spheres. **(80a:55001)**

55M99 None of the above, but in this section

Kuperberg, Włodzimierz Unstable sets and the set of unstable points. (Russian summary) **80c:55003**

Secondary classifications:

James, I. M. (*with* Segal, Graeme) On equivariant homotopy type. **(80k:55045)**
Mather, John N. Area preserving twist homeomorphism of the annulus. **(80k:58068)**
Segal, Graeme *See* **James, I. M., (80k:55045)**

55Nxx Homology and cohomology theories [See also 57Txx.]

55N05 Čech types

Bartík, Vojtěch Normal Aleksandrov-Čech cohomology. (Russian. English summary) **80i:55002**
Calder, Allan Uniform homotopy. **80i:55003**

Secondary classifications:

Bunjatov, M. R. (*with* Nasr Ibragim, Ahmed Helmi Muhammed) Homology of distributive lattices. (Russian) **(80k:55023)**
Cordier, Jean-Marc (*with* Porter, Timothy) Introduction à la théorie de la forme. I. **(80j:55012)**
(Edwards, David A.) *See* **Hastings, Harold M., (80m:55020)**
Hastings, Harold M. Addendum to: *Čech and Steenrod homotopy theories with applications to geometric topology* [Lecture Notes in Math., 542, Springer, Berlin, 1976; MR 55 #1347] Hastings and David A. Edwards. **(80m:55020)**
Kodama, Yukihiro A characteristic property of a finite-dimensional pointed FANR. **(80h:54021)**
Nasr Ibragim, Ahmed Helmi Muhammed *See* **Bunjatov, M. R., (80k:55023)**
Porter, Timothy *See* **Cordier, Jean-Marc, (80j:55012)**

55N07 Steenrod-Sitnikov homologies

Kodama, Y. (*with* Koyama, Akira) Hurewicz isomorphism theorem for Steenrod homology. **80g:55005**
Koyama, Akira *See* **Kodama, Y., 80g:55005**

Secondary classifications:

Baladze, D. O. The duality law for homology and cohomology K-groups. (Russian. English summary) **(80h:55019)**
Hastings, Harold M. Steenrod homotopy theory, homotopy idempotents, and homotopy limits. **(80k:55035)**

55N10 Singular theory

Dominguez, Eladio Interprétation géométrique de l'homologie singulière à coefficients. **80g:55006**
Esposito, Rosa (*with* Lo Re, Pia Maria; Magro, Gaetano; Parlato, Lucio) Homology cycles with coefficients. (Italian. English summary) **80m:55004**
Lo Re, Pia Maria *See* **Esposito, Rosa; et al., 80m:55004**
Magro, Gaetano *See* **Esposito, Rosa; et al., 80m:55004**
Parlato, Lucio *See* **Esposito, Rosa; et al., 80m:55004**

Secondary classifications:

Harzheim, Egbert ★Einführung in die kombinatorische Topologie. **(80k:55001)**

55N15 K-theory {For algebraic K-theory, see 18F25.}

Bödigheimer, Carl-Friedrich Splitting the Künneth sequence in K-theory. **80k:55013**
Fujii, Kazuyuki A representation of complex K-groups by means of a Banach algebra. **80d:55003**
Jankowski, Andrzej Splitting of K-theory and g_* characteristic numbers. **80e:55008**
Kaminker, Jerome (*with* Schochet, Claude) Analytic equivariant K-homology. **80f:55006**
Kozima, Kazumoto The Hopf algebra structure of $K_*(\Omega Sp(n))$. **80k:55014**
Meier, Willi Complex and real K-theory and localization. **80b:55003**
Raeburn, Iain K-theory and K-homology relative to a Π_∞-factor. **80a:55005**
Schochet, Claude *See* **Kaminker, Jerome, 80f:55006**

Secondary classifications:

Bousfield, A. K. The localization of spectra with respect to homology. **(80m:55006)**
Lozano, M. T. The Fáry spectral sequence in K-theory. (Spanish. English summary) **(80i:55018)**
Snaith, Victor P. Algebraic cobordism and K-theory. **(80k:57060)**

55N20 Generalized (extraordinary) homology and cohomology theories

Adhikari, M. R. Construction of some general cohomology theories. **80j:55004**
Boardman, J. M. Splitting of MU and other spectra. **80e:55009**
Original Brown-Peterson spectra. **80m:55005**
Bousfield, A. K. The localization of spectra with respect to homology. **80m:55006**
Hosobuchi, Masami *See* **Inoue, Yoshihiro, 80i:55004**
Huber, Martin (*with* Meier, Willi) Cohomology and the derived functors of the inverse limit. **80e:55010**
Inoue, Yoshihiro (*with* Hosobuchi, Masami) Cohomology theories on the category of CW-triads. **80i:55004**
May, J. P. A_∞ ring spaces and algebraic K-theory. **80k:55015**
Mdzinarišvili, L. D. Homology, homotopy and spectra. (Russian. English summary) **80b:55004**
Meier, Willi *See* **Huber, Martin, 80e:55010**
Moreira, Manuel Ricardo Falcão Primitives of $BP_*(BP)$ modulo an invariant prime ideal. **80b:55004**
Nanda, Sribatsa On Kan extension of cohomology on the category of p-local spaces. **80g:55007**
Nishida, Goro The transfer homomorphism in equivariant generalized cohomology theories. **80a:55006**

Smith, Larry On ideals in Ω^U_*. II. **80j:55005**
Steiner, R. J. The group of units in K-theory modulo an odd prime. **80k:55016**
Yagita, Nobuaki On an invariant defined by using $P(n)_*(-)$ theory. **80f:55007**
Yanagida, Syun-ichi (*with* Yosimura, Zen-ichi) Ring spectra with coefficients in $V(1)$ and $V(2)$. I. **80h:55005a**
Yosimura, Zen-ichi Ring spectra with coefficients in $V(1)$ and $V(2)$. II. **80h:55005b**
See also Yanagida, Syun-ichi, **80h:55005a**

Secondary classifications:

Adams, John Frank ★Infinite loop spaces. **(80d:55001)**
Araki, Shôrô (*with* Murayama, Mitutaka) τ-cohomology theories. **(80d:55022a)**
Clarke, Francis On $\mathrm{Ext}_{K_*}^{(K)}(\pi_*(K), K_*(MU))$. **(80f:55019)**
Cohen, F. R. Braid orientations and bundles with flat connections. **(80e:57033)**
May, J. P. H_∞ ring spectra and their applications. **(80e:55014)**
The spectra associated to permutative categories. **(80e:55015)**
Morava, Jack Completions of complex cobordism. **(80i:57026)**
Murayama, Mitutaka *See* Araki, Shôrô, **(80d:55022a)**

55N22 Bordism and cobordism theories, formal group laws [See also 14L05, 57R75, 57R77, 57R85, 57R90.]

Buhštaber, V. M. Characteristic classes in cobordism and topological applications of the theory of single-valued and two-valued formal groups. (Russian) **80g:55008**
(*with* Šokurov, A. V.) The Landweber-Novikov algebra and formal vector fields on the line. (Russian) **80k:55017**
Giambalvo, V. Some tables for formal groups and BP. **80d:55004**
Mironov, O. K. Multiplications in cobordism theories with singularities and the Steenrod-tom Dieck operations. (Russian) **80d:55005**
Morava, Jack The E_2-term of Novikov's spectral sequence. **80k:55018**
Segal, David M. The cooperations of $MU_*(CP^\infty)$ and $MU_*(HP^\infty)$ and the primitive generators. **80j:55006**
Šokurov, A. V. *See* Buhštaber, V. M., **80k:55017**
Würgler, Urs On the relation of Morava K-theories to Brown-Peterson homology. **80f:55005**
A splitting theorem for certain cohomology theories associated to BP*(−). **80k:55019**
Yagita, Nobuaki A topological note on the Adams spectral sequence based on Morava's K-theory. **80a:55007**

Secondary classifications:

Becker, J. C. (*with* Schultz, Reinhard) Fixed-point indices and left invariant framings. **(80c:57045)**
Bier, Tomas (*with* Ray, Nigel) Detecting framed manifolds in the 8 and 16 stems. **(80g:55027)**
Boardman, J. M. Original Brown-Peterson spectra. **(80m:55005)**
Domínguez Murillo, Eladio Geometrical Poincaré duality. **(80m:57011)**
Esposito, Rosa (*with* Lo Re, Pia Maria; Magro, Gaetano; Parlato, Lucio) Homology cycles with coefficients. (Italian. English summary) **(80m:55004)**
Jakubowski, Tadeusz Generalized Brouwer's degree. (Russian summary) **(80f:55003)**
Kihl, José Carlos de Souza Weakly complex involutions. **(80e:57040)**
Lo Re, Pia Maria *See* Esposito, Rosa; et al., **(80m:55004)**
Magro, Gaetano *See* Esposito, Rosa; et al., **(80m:55004)**
May, J. P. (*with* Thomason, Robert W.) The uniqueness of infinite loop space machines. **(80g:55015)**
Moreira, Manuel Ricardo Falcão Primitives of $BP_*(BP)$ modulo an invariant prime ideal. **(80h:55004)**
Parlato, Lucio *See* Esposito, Rosa; et al., **(80m:55004)**
Ravenel, Douglas C. A novice's guide to the Adams-Novikov spectral sequence. **(80h:55057)**
Ray, Nigel *See* Bier, Tomas, **(80g:55027)**
Schultz, Reinhard *See* Becker, J. C., **(80e:57045)**
Thomason, Robert W. *See* May, J. P., **(80g:55015)**
Yagita, Nobuaki On an invariant defined by using $P(n)_*(-)$ theory. **(80f:55007)**
Yanagida, Syun-ichi (*with* Yosimura, Zen-ichi) Ring spectra with coefficients in $V(1)$ and $V(2)$. I. **(80h:55005a)**
Yosimura, Zen-ichi Ring spectra with coefficients in $V(1)$ and $V(2)$. II. **(80h:55005b)**
See also Yanagida, Syun-ichi, **(80h:55005a)**

55N25 Homology with local coefficients, equivariant cohomology

McLeod, John The Kunneth formula in equivariant K-theory. **80m:55007**

Secondary classifications:

Kahn, Peter J. The homotopy-dimension of nilpotent spaces. **(80g:55022)**

55N30 Sheaf cohomology [See also 18F20, 32C35, 32L10.]

Kato, Goro C. *See* Lubkin, Saul, **80d:55006**
Lubkin, Saul (*with* Kato, Goro C.) Second Leray spectral sequence of relative hypercohomology. **80d:55006**
Stieglitz, Andreas Equivariant sheaf cohomology. **80k:55020**

55N35 Other homology theories

Bairamov, S. A. The Thom-Gysin homology sequence over inverse spectra of topological spaces. (Russian. Azerbaijani and English summaries) **80k:55022**
Bunjatov, M. R. (*with* Nasr Ibragim, Ahmed Helmi Muhammed) Homology of distributive lattices. (Russian) **80k:55023**
Ferrero, Pier Luigi On uniform singular homology. (Italian. English summary) **80j:55007**
Hirashima, Yasumasa A note on cohomology with local coefficients. **80f:55008**
Mdzinarišvili, L. D. Functional homology. (Russian. English summary) **80g:55009**
Nasr Ibragim, Ahmed Helmi Muhammed Homotopy in the spectral homology theory homologies of Boolean algebras with closure. (Russian) **80k:55021**
See also Bunjatov, M. R., **80k:55023**
Spanier, E. H. Tautness for Alexander-Spanier cohomology. **80a:55008**

55N40 Axioms for homology theory and uniqueness theorems

Agami, Raga Mohamed Baha èl'-Din The cohomology for inverse spectra of chain complexes and Boolean algebras. (Russian. Azerbaijani and English summaries) **80f:55009**

Secondary classifications:

Jerrard, Richard A stronger invariant for homology theory. **(80b:55006)**
Mdzinarišvili, L. D. Functional homology. (Russian. English summary) **(80g:55009)**

55N45 Products and intersections

55N99 None of the above, but in this section

Secondary classifications:

Morava, Jack Hypercohomology of topological categories. **(80e:55040)**

55Pxx Homotopy theory (For simple homotopy type, see 57Q10.)

Heath, Philip R. ★An introduction to homotopy theory via groupoids and universal constructions. **80g:55010**

55P05 Homotopy extension properties, cofibrations

Booth, Peter I. (*with* Heath, Philip R.; Piccinini, Renzo A.) Fibre preserving maps and functional spaces. **80g:55011**
Gottlieb, Daniel Henry Lifting actions in fibrations. **80c:55004**
Heath, Philip R. *See* Booth, Peter I.; et al., **80g:55011**
Kieboom, R. W. Some theorems on weak (and rather weak) cofibrations. **80k:55024**
Kraus, Jürgen F. Mayer-Vietoris-Prinzipien für Cofaserungen. **80e:55011**
Piccinini, Renzo A. *See* Booth, Peter I.; et al., **80g:55011**

Secondary classifications:

Kamps, Klaus Heiner Note on normal sequences of chain complexes. **(80i:55019)**

55P10 Homotopy equivalences

Brahman, A. L. Finiteness conditions for open manifolds and infinite complexes. (Russian) **80b:55005**
Davis, Donald M. Stable p-equivalences of stunted complex projective spaces. **80j:55008**
Jerrard, Richard A stronger invariant for homology theory. **80b:55006**
Kahn, Donald W. The rigidity problem for stable spaces. **80h:55006**
Latch, Dana May (*with* Thomason, Robert W.; Wilson, W. Stephen) Simplicial sets from categories. **80e:55012**
Mukkholm, Hans J. Erratum to: "shm maps of differential graded algebras. I. A characterization up to homotopy" [J. Pure Appl. Algebra **9** (1976), no. 1, 39–46; MR 55 #11247a]. **80m:55008**
Sawashita, Norichika The group of self-homotopy equivalences. (Japanese) **80k:55025**
Swarup, G. A. An analogue of the Dror-Whitehead theorem. **80d:55007**
Thomason, Robert W. *See* Latch, Dana May; et al., **80e:55012**
Walker, Marshall Homotopy pullbacks and the Hopf invariant. **80g:55012**
Wilson, W. Stephen *See* Latch, Dana May; et al., **80e:55012**

Secondary classifications:

Hirschhorn, Philip S. On the "stable" homotopy type of knot complements. **(80k:57040)**
James, I. M. (*with* Segal, Graeme) On equivariant homotopy type. **(80k:55045)**
Segal, Graeme *See* James, I. M., **(80k:55045)**
Šlika, Jaromír On homotopical equivalence of tolerance spaces. **(80j:05052)**

55P15 Classification of homotopy type

Body, Richard (*with* Douglas, Roy) Rational homotopy and unique factorization. **80d:55008**
Davis, Donald M. BP-operations and mappings of stunted complex projective spaces. **80m:55009**
Douglas, Roy *See* Body, Richard, **80d:55008**
Dror, E. (*with* Dwyer, William G.; Kan, Daniel M.) Self-homotopy equivalences of Postnikov conjugates. **80f:55010**
Dwyer, William G. *See* Dror, E.; et al., **80f:55010**
Kan, Daniel M. *See* Dror, E.; et al., **80f:55010**
Wojtkowiak, Zdzisław On the finiteness obstruction of nilpotent spaces of the same genus. **80d:55009**

Secondary classifications:

Body, Richard (*with* Douglas, Roy) Tensor products of graded algebras and unique factorization. **(80h:16002)**
Davis, Donald M. Stable p-equivalences of stunted complex projective spaces. **(80j:55008)**

Douglas, Roy *See* **Body, Richard.** (80k:16002)
Halperin, Stephen (*with* Stasheff, James) Obstructions to homotopy equivalences. (80j:55016)
Hollingsworth, J. G. (*with* Sher, R. B.) On the cancellation of shapes from products. (80k:55036)
Jajodia, Sushil On 2-dimensional CW-complexes with a single 2-cell. (80k:57005)
Lemaire, Jean-Michel (*with* Sigrist, François) Dénombrement de types d'homotopie rationnelle. (English summary) (80b:55009)
Sher, R. B. *See* **Hollingsworth, J. G.** (80k:55036)
Sigrist, François *See* **Lemaire, Jean-Michel.** (80b:55009)
Stasheff, James *See* **Halperin, Stephen.** (80j:55016)

55P20 Eilenberg-Mac Lane spaces

Johnson, Francis E. A. On the realisability of polysurface groups. 80g:55013

55P25 Spanier-Whitehead duality

55P30 Eckmann-Hilton duality

55P35 Loop spaces

Cohen, F. R. (*with* Mahowald, Mark; Milgram, R. James) The stable decomposition for the double loop space of a sphere. 80j:55009
Kahn, Daniel S. On the stable decomposition of $\Omega^{\infty}S^{\infty}A$. 80d:55010
Kiehoom, R. W. When is the loop class of a fibration equal to zero? (Romanian summary) 80c:55005
Kono, Akira (*with* Kozima, Kazumoto) The space of loops in a symplectic group. 80k:55026
Kozima, Kazumoto *See* **Kono, Akira.** 80k:55026
Mahowald, Mark *See* **Cohen, F. R.; et al.,** 80j:55009
Milgram, R. James *See* **Cohen, F. R.; et al.,** 80j:55009
Miller, Haynes R. (*with* Priddy, Stewart B.) On G and the stable Adams conjecture. 80k:55027
Priddy, Stewart B. *See* **Miller, Haynes R.,** 80k:55027
Thomason, Robert W. Uniqueness of delooping machines. 80e:55013
Watanabe, Takashi The homology of the loop space of the exceptional group F_4. 80g:55014
Cohomology operations in the loop space of the compact exceptional group F_4. 80k:55028

Secondary classifications:

Cohen, F. R. Little cubes and the classifying spaces for n-sphere fibrations. (80h:55012)
Kozima, Kazumoto The Hopf algebra structure of $K_*(\Omega Sp(n))$. (80k:55014)
May, J. P. The spectra associated to permutative categories. (80e:55015)
(*with* Thomason, Robert W.) The uniqueness of infinite loop space machines. (80g:55015)
Steiner, R. J. The group of units in K-theory modulo an odd prime. (80k:55016)
Thomason, Robert W. *See* **May, J. P.,** (80g:55015)

55P40 Suspensions

Dwyer, William G. The tame homotopy groups of a suspension. 80j:55010

Secondary classifications:

Hardie, K. A. Kan lift-extensions in C. G. Haus. (80j:55024)
Raymond, Frank (*with* Wigner, David) Constructions of aspherical manifolds. (80d:57003)
Selick, Paul Odd primary torsion in $\pi_k(S^3)$. (80c:55010)
Wigner, David *See* **Raymond, Frank.** (80d:57003)

55P42 Stable homotopy theory, spectra

Gitler, Samuel Some problems concerning projective spaces. (Spanish) 80k:55029
Laitinen, Erkki On the Burnside ring and stable cohomotopy of a finite group. 80k:55030
May, J. P. H_{∞} ring spectra and their applications. 80e:55014
The spectra associated to permutative categories. 80e:55015
(*with* Thomason, Robert W.) The uniqueness of infinite loop space machines. 80g:55015
Rabinstein, Ryszard L. Some remarks on the cohomotopy of $\mathbf{R}P^{\infty}$. 80f:55011
Thomason, Robert W. *See* **May, J. P.,** 80g:55015

Secondary classifications:

Bousfield, A. K. (*with* Friedlander, E. M.) Homotopy theory of Γ-spaces, spectra, and bisimplicial sets. (80e:55021)
Cohen, F. R. (*with* Mahowald, Mark; Milgram, R. James) The stable decomposition for the double loop space of a sphere. (80j:55009)
Davis, Donald M. BP-operations and mappings of stunted complex projective spaces. (80m:55009)
Friedlander, E. M. *See* **Bousfield, A. K.,** (80e:55021)
Kahn, Donald W. The rigidity problem for stable spaces. (80h:55006)
Mahowald, Mark *See* **Cohen, F. R.; et al.,** (80j:55009)
Milgram, R. James *See* **Cohen, F. R.; et al.,** (80j:55009)
Ray, Nigel Framed manifold models for the elements β_1. (80f:55014)

55P45 H-spaces and duals

Ch'èn, Ping Hung On the existence of associative comultiplications of a 2-cell complex. I. 80k:55031
Cooke, George E. (*with* Harper, John R.; Zabrodsky, A.) Torsion free mod$p$ H-spaces of low rank. 80k:55032
Gonçalves, Daciberg Lima Mod 2 homotopy-associative H-spaces. 80g:55016
Harper, John R. Compact Lie groups and finite H-spaces. 80e:55016
On the construction of mod p H-spaces. 80g:55017
Torsion free mod p H-spaces. 80d:55011
Regularity of finite H-spaces. 80i:55006
H-spaces with torsion. 80k:55033
See also **Cooke, George E.; et al.,** 80k:55032
Hilton, Peter (*with* Mislin, Guido; Roitberg, Joseph) On co-H-spaces. 80i:55007
Hubbuck, J. R. H-spaces of a given rank. 80m:55010
Two examples on finite H-spaces. 80m:55011
A conjecture on the p-regularity of an H-space. 80k:55034
Kane, Richard BP homology and finite H-spaces. 80i:55008
The module of indecomposables for mod 2 finite H-spaces. 80i:55039
Komornicki, Wojciech Multiplications in two-cell spectra. 80a:55009
Lin, James P. H-spaces without simple torsion. 80b:55007
On the topology of finite H-spaces. 80j:55011
Even generators in the mod 2 cohomology of a finite H-space. 80m:55012
Mislin, Guido *See* **Hilton, Peter; et al.,** 80i:55007
Pedersen, Erik Kjaer Smoothings of H-spaces. 80e:55017
Smoothing H-spaces. 80d:55012
Roitberg, Joseph *See* **Hilton, Peter; et al.,** 80i:55007
Shar, Albert O. Localization, algebraic loops and H-spaces. II. 80k:55039b
Zabrodsky, A. *See* **Cooke, George E.; et al.,** 80k:55032

Secondary classifications:

Browder, William Algebraic K-theory with coefficients Z/p. (80b:18011)
Hilton, Peter On free maps and free homotopies. (80h:55009)
Lance, Timothy Local H-maps of classifying spaces. (80k:55051)
Lucas, Dean A multiplication in N-space. (80b:13011)
Salzmann, Helmut Automorphismengruppen 8-dimensionaler Ternärkörper. (80i:51004)
Shar, Albert O. Localization, algebraic loops and H-spaces. I. (80k:55039a)

55P47 Infinite loop spaces

Boardman, J. M. (*with* Vogt, R. M.) Tensor products of theories, application to infinite loop spaces. 80f:55012
Cohen, F. R. (*with* May, J. P.; Taylor, Laurence R.) Splitting of certain spaces CX. 80a:55010
Fiedorowicz, Zbigniew (*with* Priddy, Stewart B.) ★Homology of classical groups over finite fields and their associated infinite loop spaces. 80g:55018
May, J. P. *See* **Cohen, F. R.; et al.,** 80a:55010
Miller, Haynes A spectral sequence for the homology of an infinite delooping. 80g:55019
Priddy, Stewart B. *See* **Fiedorowicz, Zbigniew,** 80g:55018
Taylor, Laurence R. *See* **Cohen, F. R.; et al.,** 80a:55010
Vogt, R. M. *See* **Boardman, J. M.,** 80f:55012

Secondary classifications:

Adams, John Frank ★Infinite loop spaces. (80d:55001)
May, J. P. A_{∞} ring spaces and algebraic K-theory. (80k:55015)
Schwartz, Lionel Orientabilité du fibré de Hopf complexe dans la théorie cohomologique associée à la K-théorie d'un corps fini. (English summary) (80m:55024)

55P50 Category and cocategory, etc.

55P55 Shape theory [See also 54C56, 54F43, 55Q07.]

Bauer, Friedrich W. Some relations between shape constructions. 80b:55007
Čerin, Zvonko Homotopy properties of locally compact spaces at infinity—triviality and movability. (Serbo-Croatian summary) 80g:55020
Homotopy properties of locally compact spaces at infinity-calmness and smoothness. 80m:55013
Cordier, Jean-Marc (*with* Porter, Timothy) Introduction à la théorie de la forme. I. 80j:55012
Dydak, Jerzy The Whitehead and the Smale theorems in shape theory. 80h:55008
Hastings, Harold M. Steenrod homotopy theory, homotopy idempotents, and homotopy limits. 80k:55035
Hollingsworth, J. G. (*with* Sher, R. B.) On the cancellation of shapes from products. 80k:55036
Husch, Lawrence S. Stability theorem for shape equivalences. (Russian summary) 80d:55013
Intersections of ANR's. 80m:55014
Levienko, B. T. A classification theorem in shape theory. (Russian. Georgian and English summaries) 80i:55010
MacDonald, John L. Categorical shape theory and the back and forth property. 80j:55013
Mardešić, Sibe (*with* Rushing, T. B.) Shape fibrations. I. 80f:55013a
Comparing fibres in a shape fibration. (Serbo-Croatian summary) 80g:55021
(*with* Rushing, T. B.) Shape fibrations. II. 80f:55013b
Porter, Timothy Coherent prohomotopy theory. 80m:55015
See also **Cordier, Jean-Marc,** 80j:55012
Rushing, T. B. Cell-like maps, approximate fibrations and shape fibrations. 80k:55037
See also **Mardešić, Sibe,** 80f:55013a *and* **Mardešić, Sibe,** 80f:55013b

Sakai, Katsuro Some properties of MAR and MANR. **80e:55018**
Sher, R. B. Liftings of shape morphisms to finite covers. **80m:55016**
See also **Hollingsworth, J. G., 80k:55036**
Singh, Sukhjit On a problem of Borsuk. (Russian summary) **80f:55011**
Skordev, G. S. The shape of compact, connected and finite-dimensional groups. (Russian) **80k:55038**

Secondary classifications:

Dydak, Jerzy (*with* Segal, Jack) ★Shape theory. **(80b:54020)**
Frei, Armin (*with* Kleisli, Heinrich) A question in categorical shape theory: when is a shape-invariant functor a Kan extension? **(80k:18003)**
Keesling, James The Stone-Čech compactification and shape dimension. **(80j:54030)**
Kleisli, Heinrich *See* **Frei, Armin, (80k:18003)**
Nowak, Slawomir Some remarks concerning the fundamental dimension of the Cartesian product of two compacta. **(80b:55001)**
Rubanov, I. S. Characterization of shapes of compacta with the aid of spectra of nerves of coverings. (Russian) **(80g:54024)**
Segal, Jack An introduction to shape theory. **(80c:54014)**
See also **Dydak, Jerzy, (80b:54020)**
Skordev, G. S. The shape of solenoidal spaces. (Russian) **(80e:54046)**
Ungar, Š. *n*-connectedness of inverse systems and applications to shape theory. (Serbo-Croatian summary) **(80e:55023)**
Watanabe, Tadashi On spaces which have the shape of compact metric spaces. **(80f:54018)**
Wattenberg, Frank Nonstandard analysis and the theory of shape. **(80c:54057)**

55P60 Localization and completion

Curtis, Morton (*with* Terrell, George) HP^{∞}, genuine and counterfeit. **80j:55014**
Hilton, Peter Non-cancellation phenomena in topology. **80a:55011**
On orbit sets for group actions and localization. **80c:55006**
(*with* Mislin, Guido; Roitberg, Joseph; Steiner, Richard) On free maps and free homotopies into nilpotent spaces. **80c:55007**
On free maps and free homotopies. **80h:55009**
(*with* Mislin, Guido; Roitberg, Joseph) On co-*H*-spaces. **80d:55014**
Hirashima, Yasumasa A note on Sullivan completion. **80m:55017**
Kahn, Peter J. The homotopy-dimension of nilpotent spaces. **80g:55022**
Meier, Willi Pullback theorems and phantom maps. **80g:55023**
Mislin, Guido *See* **Hilton, Peter; et al., 80c:55007** *and* **Hilton, Peter; et al., 80d:55014**
Munkholm, Hans J. DGA algebras as a Quillen model category. Relations to shm maps. **80m:55018**
Quinn, Frank Finite nilpotent group actions on finite complexes. **80i:55012**
Roitberg, Joseph Free homotopy theory and localization. **80g:55024**
See also **Hilton, Peter; et al., 80c:55007** *and* **Hilton, Peter; et al., 80d:55014**
Shar, Albert O. Localization, algebraic loops and *H*-spaces. I. **80k:55039a**
Steiner, Richard *See* **Hilton, Peter; et al., 80c:55007**
Terrell, George *See* **Curtis, Morton, 80j:55014**
Wojtkowiak, Zdzisław The Wall finiteness obstruction of nilpotent spaces of the same genus. (Russian summary) **80e:55019**
On fibrations which are also cofibrations. (Russian summary) **80j:55015**

Secondary classifications:

Bousfield, A. K. The localization of spectra with respect to homology. **(80m:55006)**
Cassidy, Charles Le genre d'un groupe nilpotent avec opérateurs. **(80e:20044)**
Cooke, George E. (*with* Harper, John R.; Zabrodsky, A.) Torsion free mod p *H*-spaces of low rank. **(80k:55032)**
Davis, Donald M. BP-operations and mappings of stunted complex projective spaces. **(80m:55009)**
Harper, John R. *See* **Cooke, George E.; et al., (80k:55032)**
Lance, Timothy Local *H*-maps of classifying spaces. **(80k:55051)**
Mislin, Guido Conditions for finite domination for certain complexes. **(80c:55009)**
Nanda, Sribatsa On Kan extension of cohomology on the category of p-local spaces. **(80g:55007)**
Steiner, R. J. The group of units in *K*-theory modulo an odd prime. **(80k:55016)**
Zabrodsky, A. *See* **Cooke, George E.; et al., (80k:55032)**

55P62 Rational homotopy theory

Andrews, Peter (*with* Arkowitz, Martin) Sullivan's minimal models and higher order Whitehead products. **80b:55008**
Arkowitz, Martin *See* **Andrews, Peter, 80b:55008**
Chen, Kuo Tsai Erratum to: "Pullback de Rham cohomology of the free path fibrations" [Trans. Amer. Math. Soc. **242** (1978), 307–318; MR **57** #17678]. **80k:55040**
Douglas, Roy The uniqueness of coproduct decompositions for algebras over a field. **80k:55041**
Félix, Yves Déformation d'espaces rationnels de même cohomologie. (English summary) **80m:55019**
Haefliger, André Whitehead products and differential forms. **80a:55012**
Halperin, Stephen (*with* Stasheff, James) Obstructions to homotopy equivalences. **80j:55016**
Lemaire, Jean-Michel (*with* Sigrist, François) Dénombrement de types d'homotopie rationnelle. (English summary) **80b:55009**
Miller, Timothy James On the formality of $(k-1)$-connected compact manifolds of dimension less than or equal to $4k-2$. **80j:55017**
Morgan, John W. The algebraic topology of smooth algebraic varieties. **80e:55020**
Neisendorfer, Joseph Lie algebras, coalgebras and rational homotopy theory for nilpotent spaces. **80b:55010**
The rational homotopy groups of complete intersections. **80j:55018**
Penna, Michael A. On a theorem of Sullivan. **80g:55025**
Shiga, Hiroo Rational homotopy type and self-maps. **80k:55042**
Sigrist, François *See* **Lemaire, Jean-Michel, 80b:55009**
Stasheff, James Rational homotopy-obstruction and perturbation theory. **80d:55015**
See also **Halperin, Stephen, 80j:55016**
Vigué-Poirrier, Micheline Formalité d'une application continue. (English summary) **80k:55043**

Secondary classifications:

Allday, Christopher Rational homotopy and torus actions. **(80m:57033)**
Body, Richard (*with* Douglas, Roy) Rational homotopy and unique factorization. **(80d:55008)**
(*with* Douglas, Roy) Tensor products of graded algebras and unique factorization. **(80h:16002)**
Cenkl, Bohumil (*with* Porter, Richard) Complétion de Lazard des groupes par des formes différentielles. (English summary) **(80b:58004)**
Chen, Kuo Tsai Iterated integration and loopspace cohomology. **(80d:58003)**
Path space differential forms and transports of connections. **(80i:58003)**
Douglas, Roy *See* **Body, Richard, (80d:55008)** *and* **Body, Richard, (80h:16002)**
Morgan, John W. Hodge theory for the algebraic topology of smooth algebraic varieties. **(80g:32013)**
Neisendorfer, Joseph (*with* Taylor, Laurence R.) Dolbeault homotopy theory. **(80f:32004)**
Porter, Richard *See* **Cenkl, Bohumil, (80b:58004)**
Taylor, Laurence R. *See* **Neisendorfer, Joseph, (80f:32004)**

55P65 Homotopy functors

Bousfield, A. K. (*with* Friedlander, E. M.) Homotopy theory of Γ-spaces, spectra, and bisimplicial sets. **80e:55021**
Friedlander, E. M. *See* **Bousfield, A. K., 80e:55021**

Secondary classifications:

Fritsch, Rudolf (*with* Latch, Dana May) Homotopy inverses for nerve. **(80c:18010)**
Latch, Dana May *See* **Fritsch, Rudolf, (80c:18010)**
Neisendorfer, Joseph Lie algebras, coalgebras and rational homotopy theory for nilpotent spaces. **(80b:55010)**

55P99 None of the above, but in this section

Bartík, Vojtěch On the bijectivity of the canonical transformation $[\beta X;Y]\to[X;Y]$. **80c:55008**
(Edwards, David A.) *See* **Hastings, Harold M., 80m:55020**
Hastings, Harold M. Addendum to: *Čech and Steenrod homotopy theories with applications to geometric topology* [Lecture Notes in Math., 542, Springer, Berlin, 1976; MR 55 #1347] Hastings and David A. Edwards. **80m:55020**
Hausmann, Jean-Claude (*with* Husemoller, Dale) Acyclic maps. **80k:55044**
Husemoller, Dale *See* **Hausmann, Jean-Claude, 80k:55044**
James, I. M. (*with* Segal, Graeme) On equivariant homotopy type. **80k:55045**
Mislin, Guido Conditions for finite domination for certain complexes. **80c:55009**
Finitely dominated complexes with metacyclic fundamental groups. **80a:55013**
Segal, Graeme *See* **James, I. M., 80k:55045**

Secondary classifications:

Baglivo, Jenny A. An equivariant Wall obstruction theory. **(80k:57070)**
Calder, Allan Uniform homotopy. **(80i:55003)**
Dyer, Michael N. On the essential height of homotopy trees with finite fundamental group. **(80e:57018)**
Hansen, Vagn Lundsgaard The homotopy type of the space of maps of a homology 3-sphere into the 2-sphere. **(80k:58032)**
Marcum, Howard J. Homotopy decompositions for product spaces. **(80k:55047)**
Munkholm, Hans J. DGA algebras as a Quillen model category. Relations to shm maps. **(80m:55018)**
Walker, Marshall Homotopy pullbacks and the Hopf invariant. **(80g:55012)**

55Qxx Homotopy groups

55Q05 Homotopy groups, general; sets of homotopy classes

de Carvalho, João Pitombeira Sets of homotopy classes of mappings and their utility in algebraic topology. (Portuguese) **80e:55022**
Demaria, D. C. Relations between the regular homotopy of graphs and the classical homotopy of polyhedra. (Italian. English summary) **80i:55013**
Gandini, Pier Mario Regular triples. (Italian. English summary) **80m:55021**
Matsuda, Toshimitsu On the equivariant self-homotopy equivalences of spheres. **80h:55010**

Secondary classifications:

Husch, Lawrence S. Stability theorem for shape equivalences. (Russian summary) **(80d:55013)**
Shiga, Hiroo Rational homotopy type and self-maps. **(80k:55042)**
Strambach, Karl Homotopieklassen idempotenter Multiplikationen. **(80b:22006)**

55Q07 Shape groups

Ungar, Š. *n*-connectedness of inverse systems and applications to shape theory. (Serbo-Croatian summary) **80e:55023**

Secondary classifications:

Dydak, Jerzy The Whitehead and the Smale theorems in shape theory. **(80h:55008)**
Kodama, Y. (*with* Koyama, Akira) Hurewicz isomorphism theorem for Steenrod homology. **(80g:55005)**
Kodama, Yukihiro A characteristic property of a finite-dimensional pointed FANR. **(80h:54021)**
Koyama, Akira *See* **Kodama, Y.**, **(80g:55005)**

55Q10 Stable homotopy groups

Mahowald, Mark The construction of small ring spectra. **80d:55016**
Nishida, Goro On a characterization of finite groups of p-rank 1. **80a:55014**

Secondary classifications:

Alexander, J. C. (*with* Yorke, James A.) Calculating bifurcation invariants as elements in the homotopy of the general linear group. **(80a:58014)**
Yorke, James A. *See* **Alexander, J. C.**, **(80a:58014)**

55Q15 Whitehead products and generalizations

Marcum, Howard J. Stiefel manifolds and similarity mappings of spheres. **80k:55046**
Homotopy decompositions for product spaces. **80k:55047**
Twisted Whitehead products. **80j:55019**

Secondary classifications:

Haefliger, André Whitehead products and differential forms. **(80a:55012)**
Retah, V. S. Massey operations in Lie superalgebras and differentials of the Quillen spectral sequence. (Russian) **(80d:55025)**

55Q20 Homotopy groups of wedges, joins, and simple spaces

Adeniran, Tinuoye M. A proof of the exactness of the homotopy sequence of a fibration pair. **80i:55014**

Secondary classifications:

Dula, G. (*with* Katz, E.) Computation of the homology of $\Omega(X \vee Y)$. **(80m:55026)**
Katz, E. *See* **Dula, G.**, **(80m:55026)**

55Q25 Hopf invariants

Barratt, M. G. Twisted Lie algebras. **80d:55017**
Hanks, C. H. On the Hopf construction associated with a composition. **80i:55015**

55Q30 Homotopy groups of triads, n-ads

Lewis, Robert H. Two results relating nilpotent spaces and cofibrations. **80b:55011**

Secondary classifications:

Andrews, Peter (*with* Arkowitz, Martin) Sullivan's minimal models and higher order Whitehead products. **(80b:55008)**
Arkowitz, Martin *See* **Andrews, Peter**, **(80b:55008)**

55Q35 Operations in homotopy groups

Secondary classifications:

Cohen, F. R. (*with* May, J. P.; Taylor, Laurence R.) Splitting of certain spaces CX. **(80a:55010)**
May, J. P. *See* **Cohen, F. R.; et al.**, **(80a:55010)**
Taylor, Laurence R. *See* **Cohen, F. R.; et al.**, **(80a:55010)**

55Q40 Homotopy groups of spheres

Cohen, F. R. (*with* Moore, J. C.; Neisendorfer, Joseph) Torsion in homotopy groups. **80e:55024**
Jones, John D. S. The Kervaire invariant of extended power manifolds. **80g:55026**
Moore, J. C. *See* **Cohen, F. R.; et al.**, **80e:55024**
Neisendorfer, Joseph *See* **Cohen, F. R.; et al.**, **80e:55024**
Selick, Paul Odd primary torsion in $\pi_k(S^3)$. **80c:55010**

Secondary classifications:

Dwyer, William G. The tame homotopy groups of a suspension. **(80j:55010)**
Golo, V. L. (*with* Perelomov, A. M.) A few remarks on chiral theories with sophisticated topology. **(80i:81029)**
Perelomov, A. M. *See* **Golo, V. L.**, **(80i:81029)**

55Q45 Stable homotopy of spheres

Bier, Tomas (*with* Ray, Nigel) Detecting framed manifolds in the 8 and 16 stems. **80g:55027**
Lam, Kee Yuen Nonsingular bilinear maps and stable homotopy of spheres. **80j:55020**
Milgram, R. James (*with* Strutt, J.; Zvengrowski, P.) Projective stable stems of spheres. **80e:55025**
Ray, Nigel Framed manifold models for the elements β_1. **80f:55014**
See also **Bier, Tomas**, **80g:55027**
Strutt, J. *See* **Milgram, R. James; et al.**, **80e:55025**
Zvengrowski, P. *See* **Milgram, R. James; et al.**, **80e:55025**

Secondary classifications:

Becker, J. C. (*with* Schultz, Reinhard) Fixed-point indices and left invariant framings. **(80e:57045)**
tom Dieck, Tammo (*with* Petrie, Ted) Geometric modules over the Burnside ring. **(80h:57045)**
Petrie, Ted *See* **tom Dieck, Tammo**, **(80h:57045)**
Ravenel, Douglas C. A novice's guide to the Adams-Novikov spectral sequence. **(80k:55057)**
Schultz, Reinhard *See* **Becker, J. C.**, **(80e:57045)**

55Q50 The J-morphism

Minami, Haruo On real J-homomorphisms. **80k:55048**
Mukai, Jun-o A note on homotopy groups of a space of similarity mappings of spheres. **80g:55028**
Raunsen, Martin (*with* Smith, Larry) A geometric interpretation of sphere bundle boundaries and generalized J-homomorphisms with an application to a diagram of I. M. James. **80e:55026**
Smith, Larry *See* **Raunsen, Martin**, **80e:55026**

55Q52 Homotopy groups of special spaces

Furukawa, Yasukuni *See* **Nomura, Yasutoshi**, **80d:55018**
Mori, Masamitsu A vanishing theorem for the mod p Massey-Peterson spectral sequence. **80e:55027**
Nomura, Yasutoshi (*with* Furukawa, Yasukuni) Some homotopy groups of complex Stiefel manifolds $W_{n,2}$ and $W_{n,3}$. II. **80d:55018**
Oda, Nobuyuki Periodic families in the homotopy groups of SU(3), SU(4), Sp(2) and G_2. **80f:55015**

Secondary classifications:

Nomura, Yasutoshi Some homotopy groups of real Stiefel manifolds in the metastable range. I. **(80h:57048a)**
Some homotopy groups of real Stiefel manifolds in the metastable range. II. **(80h:57048b)**

55Q55 Cohomotopy groups

Secondary classifications:

Rubinsztein, Ryszard L. Some remarks on the cohomotopy of $\mathbb{R}P^\infty$. **(80f:55011)**
Wu, Ding Jia Cohomology operations and the groups $\pi(K, L; SY_{N-2,2})$. (Chinese) **(80h:55015)**

55Q70 Homotopy groups of special types [See also 55N05, 55N07.]

Secondary classifications:

Milgram, R. James (*with* Strutt, J.; Zvengrowski, P.) Projective stable stems of spheres. **(80e:55025)**
Strutt, J. *See* **Milgram, R. James; et al.**, **(80e:55025)**
Zvengrowski, P. *See* **Milgram, R. James; et al.**, **(80e:55025)**

55Q99 None of the above, but in this section

Secondary classifications:

Kodama, Y. (*with* Koyama, Akira) Hurewicz isomorphism theorem for Steenrod homology. **(80g:55005)**
Koyama, Akira *See* **Kodama, Y.**, **(80g:55005)**

55Rxx Fiber spaces and bundles [See also 18F15, 32Lxx, 46M20, 57R20, 57R22, 57R25.]

55R05 Fiber spaces

Booth, Peter I. (*with* Heath, Philip R.; Piccinini, Renzo A.) Characterizing universal fibrations. **80g:55029**
(*with* Heath, Philip R.; Piccinini, Renzo A.) Characterizing universal fibrations. **80e:55028**
Heath, Philip R. *See* **Booth, Peter I.; et al.**, **80e:55028** *and* **Booth, Peter I.; et al.**, **80g:55029**
Pedersen, Erik Kjaer (*with* Taylor, Laurence R.) The Wall finiteness obstruction for a fibration. **80g:55030**
Piccinini, Renzo A. *See* **Booth, Peter I.; et al.**, **80e:55028** *and* **Booth, Peter I.; et al.**, **80g:55029**
Sjerve, Denis Generalized homological reduction theorems. **80j:55021**
Taylor, Laurence R. *See* **Pedersen, Erik Kjaer**, **80g:55030**

Secondary classifications:

Bairamov, S. A. The Thom-Gysin homology sequence over inverse spectra of topological spaces. (Russian. Azerbaijani and English summaries) **(80k:55022)**
Gottlieb, Daniel Henry Partial transfers. **(80h:57024)**
Mardešić, Sibe (*with* Rushing, T. B.) n-shape fibrations. **(80m:54028)**
Rushing, T. B. *See* **Mardešić, Sibe**, **(80m:54028)**

55R10 Fiber bundles

Albu, A. C. (*with* Opriş, D.) Sur les fibrations réduites d'une G-fibration principale topologique. (Romanian summary) **80m:55022**
Ehrlich, Karel Fibrations and a transfer map in algebraic K-theory. **80g:55031**
Obădeanu, V. Espaces fibrés inductifs. (Romanian summary) **80g:55032**
Opriş, D. *See* **Albu, A. C., 80m:55022**
Papuc, Dan I. (*with* Popescu, I. P.) Considérations algébriques sur les tissus associés aux fibrés principaux différentiables. **80e:55029**
Petry, Herbert Rainer Exotic spinors in superconductivity. **80c:55011**
Popescu, I. P. *See* **Papuc, Dan I., 80e:55029**

Secondary classifications:

Balachandran, A. P. (*with* Stern, A.; Trahern, C. G.) Nonlinear models as gauge theories. **(80e:81052)**
Doria, Francisco Antonio Noncontinuous gauge potentials without magnetic monopoles. **(80c:78005)**
Giesemann, Ernst Günter Product formulas for Nielsen numbers of mappings in bundles. (Russian) **(80g:55001)**
Hrubý, J. (*with* Souček, J.) Superspace as a fibre space. **(80a:83038)**
Hauch, Lawrence S. Fibres of Hurewicz and approximate fibrations. **(80h:57018)**
Lê Dũng Tráng The geometry of the monodromy theorem. **(80i:32031)**
Sur les cycles évanouissants des espaces analytiques. (English summary) **(80i:32030)**
Le théorème de la monodromie singulier. (English summary) **(80i:32032)**
Newman, Ezra T. Source-free Yang-Mills theories. **(80d:81078)**
Suarz, P. K. Space-time connections in Lie groups. **(80a:83035)**
Souček, J. *See* **Hrubý, J., (80a:83038)**
Stern, A. *See* **Balachandran, A. P.; et al., (80e:81052)**
Trahern, C. G. *See* **Balachandran, A. P.; et al., (80e:81052)**
Trautman, Andrzej The geometry of gauge fields. **(80k:81111)**

55R15 Classification

Edwards, David A. (*with* Hastings, Harold M.) Universal open principal fibrations. **80i:55016**
Ehrlich, Karel Cross sections in fibrations. **80h:55011**
Hastings, Harold M. *See* **Edwards, David A., 80i:55016**
Rees, Elmer Some rank two bundles on $P_n\mathbf{C}$, whose Chern classes vanish. **80f:55016**
Turisco, JoAnn Quadratic mappings of spheres. **80e:55030**

Secondary classifications:

Morgan, C. Universal vector bundles. **(80k:55050)**

55R20 Spectral sequences and homology of fiber spaces [See also 55Txx.]

Drechsler, Konrad Homologie bei der Einpflanzung eines Faserbündels. **80m:55023**
Wolf, Joel The real and rational cohomology of differential fibre bundles. **80a:55015**

Secondary classifications:

Grayson, Daniel R. K_2 and the K-theory of automorphisms. **(80g:16029)**
Neumann, Walter D. Multiplicativity of signature. **(80b:57019)**

55R25 Sphere bundles and vector space bundles

Cohen, F. R. Little cubes and the classifying spaces for n-sphere fibrations. **80h:55012**
Morgan, C. Universal vector bundles. **80k:55050**
Switzer, Robert M. Complex 2-plane bundles over complex projective space. **80j:55022**

Secondary classifications:

Maljuta, Ju. M. Calculation of instantons. (Russian) **(80h:53031)**
Turisco, JoAnn Quadratic mappings of spheres. **(80e:55030)**

55R35 Classifying spaces of groups and H-spaces

Knutson, Donald Characteristic classes of permutation representations. I. The spin of a permutation. **80i:55017**
Lance, Timothy Local H-maps of classifying spaces. **80k:55051**

Secondary classifications:

Adams, John Frank Maps between classifying spaces. **(80e:55031)**
Maps between classifying spaces. II. **(80e:55032)**
Nishida, Goro On a characterization of finite groups of p-rank 1. **(80a:55014)**
Thomason, Robert W. Uniqueness of delooping machines. **(80e:55013)**

55R40 Homology of classifying spaces, characteristic classes [See also 57Txx, 57R20.]

Adams, John Frank Maps between classifying spaces. **80e:55031**
Maps between classifying spaces. II. **80e:55032**
Blanton, John D. (*with* McCrory, Clint) An axiomatic proof of Stiefel's conjecture. **80k:55052**
Evens, Leonard (*with* Kahn, Daniel S.) Chern classes of certain representations of symmetric groups. **80k:55053**
(*with* Kahn, Daniel S.) An integral Riemann-Roch formula for induced representations of finite groups. **80k:55054**
Kahn, Daniel S. *See* **Evens, Leonard, 80k:55053** *and* **Evens, Leonard, 80k:55054**
Kono, Akira (*with* Mimura, Mamoru) On the cohomology mod 2 of the classifying space of AdE_7. **80f:55017**
McCrory, Clint *See* **Blanton, John D., 80k:55052**
Mimura, Mamoru *See* **Kono, Akira, 80f:55017**
Papastavridis, Stavros Imbeddings, immersions and integrability of characteristic classes. **80h:55013**
Sigrist, François (*with* Suter, Ueli) On the exponent and the order of the groups $J(x)$. **80d:55019**
Suter, Ueli *See* **Sigrist, François, 80d:55019**

Secondary classifications:

Atiyah, Michael Francis (*with* Jones, John D. S.) Topological aspects of Yang-Mills theory. **(80j:58021)**
Avis, S. J. (*with* Isham, Christopher J.) Vacuum solutions for a twisted scalar field. **(80a:81124)**
DeWitt, Bryce S. (*with* Hart, Charles F.; Isham, Christopher J.) Topology and quantum field theory. **(80e:81056)**
Hart, Charles F. *See* **DeWitt, Bryce S.; et al., (80e:81056)**
Isham, Christopher J. *See* **Avis, S. J., (80a:81124)** *and* **DeWitt, Bryce S.; et al., (80e:81056)**
Jones, John D. S. *See* **Atiyah, Michael Francis, (80j:58021)**
Mori, Masamitsu The Steenrod operations in the Eilenberg-Moore spectral sequence. **(80e:55038)**
Wu, Jian Shi *See* **Wu, Yong Shi, (80k:81054)**
Wu, Yong Shi (*with* Wu, Jian Shi) $U_2(Q)$ invariance of the principal bundles for SU_2 dual charges and the corresponding angular momentum operators. (Chinese) **(80h:81054)**

55R45 Homology and homotopy of BO and BU; Bott periodicity

Patterson, Richard R. The square-preserving algebra endomorphisms of $H^*(BO, Z_2)$. **80g:55033**

Secondary classifications:

Kono, Akira (*with* Kozima, Kazumoto) The space of loops in a symplectic group. **(80k:55026)**
Kozima, Kazumoto *See* **Kono, Akira, (80k:55026)**

55R50 Stable classes of vector space bundles, K-theory {For algebraic K-theory, see 18F25.}

Fujino, Tsutomu (*with* Kamata, Masayoshi) J-groups of orbit manifolds $D_p(4m+3, 8n+7)$ of $S^{8m+7}\times S^{8n+7}$ by the dihedral group D_p. **80d:55020**
Kamata, Masayoshi *See* **Fujino, Tsutomu, 80d:55020**
Kobayashi, Teiichi (*with* Sugawara, Masahiro) Note on KO-rings of lens spaces mod 2. **80e:55033**
Larotonda, Angel R. (*with* López, Miguel A.) Witt ring and vector bundles. (Spanish) **80c:55034**
López, Miguel A. *See* **Larotonda, Angel R., 80e:55034**
Ochanine, Serge Formules "à la Hirzebruch" pour les invariants de Kervaire généralisés. (English summary) **80k:55055**
Schwartz, Lionel Orientabilité du fibré de Hopf complexe dans la théorie cohomologique associée à la K-théorie d'un corps fini. (English summary) **80m:55024**
Sugawara, Masahiro *See* **Kobayashi, Teiichi, 80e:55033**
Switzer, Robert M. Postnikov towers associated with complex 2-plane and symplectic line bundles. **80k:55056**

Secondary classifications:

Adams, John Frank Maps between classifying spaces. **(80e:55031)**
Maps between classifying spaces. II. **(80e:55032)**
Cowen, M. J. (*with* Douglas, R. G.) Complex geometry and operator theory. **(80f:47012)**
tom Dieck, Tammo Homotopy equivalent group representations and Picard groups of the Burnside ring and the character ring. **(80b:20005)**
Douglas, R. G. *See* **Cowen, M. J., (80f:47012)**
Golo, V. L. (*with* Monastyrskiĭ, M. I.) Topological charges and high dimensional instantons. **(80d:81072)**
Kapitanskiĭ, L. V. *See* **Vakulenko, A. F., (80i:81045)**
Monastyrskiĭ, M. I. *See* **Golo, V. L., (80d:81072)**
Vakulenko, A. F. (*with* Kapitanskiĭ, L. V.) Stability of solitons in S^2 of a nonlinear σ-model. (Russian) **(80i:81045)**

55R55 Fiberings with singularities

Secondary classifications:

Kamber, Franz W. (*with* Tondeur, Philippe) Semi-simplicial Weil algebras and characteristic classes. **(80e:57031)**
Kauffman, Louis H. Signature of branched fibrations. **(80f:57008)**
Tondeur, Philippe *See* **Kamber, Franz W., (80e:57031)**

55R60 Microbundles and block bundles [See also 57N55, 57Q50.]

55R65 Generalizations of fiber spaces and bundles

Bairamov, S. A. *See* **Bunjatov, M. R., 80e:55035**
Bunjatov, M. R. (*with* Bairamov, S. A.) The Gysin cohomology sequence for inverse spectra of topological spaces. (Russian. Azerbaijani and English summaries) **80e:55035**

Ferry, Steve Strongly regular mappings with compact ANR fibers are Hurewicz fiberings. **80d:55021**
Heath, Philip R. (*with* Kamps, Klaus Heiner) Note on attaching Dold fibrations. **80a:55016**
Kamps, Klaus Heiner *See* **Heath, Philip R., 80a:55016**

Secondary classifications:

Epstein, D. B. A. (*with* Thurston, W. P.) Transformation groups and natural bundles. **(80b:58006)**
Mardešić, Sibe Comparing fibres in a shape fibration. (Serbo-Croatian summary) **(80g:55021)**
Mukai, Juno A note on homotopy groups of a space of similarity mappings of spheres. **(80g:55028)**
Thurston, W. P. *See* **Epstein, D. B. A., (80b:58006)**

55R99 None of the above, but in this section

Secondary classifications:

Adeniran, Tinuoye M. A proof of the exactness of the homotopy sequence of a fibration pair. **(80i:55014)**
Sher, R. B. Liftings of shape morphisms to finite covers. **(80m:55016)**

55Sxx Operations and obstructions

55S05 Primary cohomology operations

55S10 Steenrod algebra

Antoniano, Enrique The action of the Steenrod algebra on projective Stiefel manifolds. **80a:55017**
Papastavridis, Stavros Generators and relations in the mod p Steenrod algebra. **80h:55014**
Zarati, Saïd ★Défaut de stabilité d'opérations cohomologiques. **80j:55023**

Secondary classifications:

Cooke, George E. Constructing spaces with interesting $\mathbb{Z}/p$-cohomology via ϵ-actions on loop spaces. **(80m:57032)**
Kane, Richard The module of indecomposables for mod 2 finite H-spaces. **(80i:55009)**
Mori, Masamitsu A vanishing theorem for the mod p Massey-Peterson spectral sequence. **(80e:55027)**

55S12 Dyer-Lashof operations

Secondary classifications:

Miller, Haynes A spectral sequence for the homology of an infinite delooping. **(80g:55019)**

55S15 Symmetric products, cyclic products

Secondary classifications:

Adhikari, M. R. Construction of some general cohomology theories. **(80j:55004)**

55S20 Secondary and higher cohomology operations

Michelsohn, M. L. Cohomology operations and vector fields. **80a:55018**
Wu, Ding Jia Cohomology operations and the groups $\pi(K, L; SY_{N-3,p})$. (Chinese) **80h:55015**

Secondary classifications:

Goncalves, Daciberg Lima Mod 2 homotopy-associative H-spaces. **(80g:55016)**

55S25 K-theory operations and generalized cohomology operations

Secondary classifications:

Davis, Donald M. BP-operations and mappings of stunted complex projective spaces. **(80m:55009)**
Segal, David M. The cooperations of $MU_*(CP^\infty)$ and $MU_*(HP^\infty)$ and the primitive generators. **(80j:55006)**

55S30 Massey products

O'Neill, Edward J. Higher order Massey products and links. **80h:55016**

Secondary classifications:

Retah, V. S. Massey operations in Lie superalgebras and differentials of the Quillen spectral sequence. (Russian) **(80d:55025)**

55S35 Obstruction theory

Heath, Philip R. (*with* Kamps, Klaus Heiner) Groupoids and classification sequences. **80a:55025**
Kamps, Klaus Heiner *See* **Heath, Philip R., 80a:55025**
Siegel, Jerrold On the structure of $B_\infty(F)$, F a stable space. **80h:55017**

Secondary classifications:

Brahman, A. L. Finiteness conditions for open manifolds and infinite complexes. (Russian) **(80b:55005)**
Davis, Donald M. (*with* Mahowald, Mark) Immersions of projective spaces. **(80e:57034)**
Dror, E. (*with* Dwyer, William G.; Kan, Daniel M.) Self-homotopy equivalences of Postnikov conjugates. **(80f:55010)**
Dwyer, William G. *See* **Dror, E.; et al., (80f:55010)**
Kan, Daniel M. *See* **Dror, E.; et al., (80f:55010)**
Mahowald, Mark *See* **Davis, Donald M., (80e:57034)**

55S36 Extension and compression of mappings

Secondary classifications:

Halperin, Stephen (*with* Stasheff, James) Obstructions to homotopy equivalences. **(80j:55016)**
Marcum, Howard J. Stiefel manifolds and similarity mappings of spheres. **(80k:55046)**
Stasheff, James *See* **Halperin, Stephen, (80j:55016)**

55S37 Classification of mappings

55S40 Sectioning fiber spaces and bundles

Crabb, M. C. (*with* Sutherland, W. A.) A bundle over the tangent sphere-bundle of a π-manifold. **80e:55036**
Sutherland, W. A. *See* **Crabb, M. C., 80e:55036**

Secondary classifications:

Cohen, F. R. (*with* Handel, D.) k-regular embeddings of the plane. **(80e:57033)**
Ehrlich, Karel Cross sections in fibrations. **(80k:55011)**
Handel, D. *See* **Cohen, F. R., (80e:57033)**

55S45 Postnikov systems, k-invariants

Davis, Donald M. (*with* Mahowald, Mark) Obstruction theory and K-theory. **80g:55034**
Mahowald, Mark *See* **Davis, Donald M., 80g:55034**

Secondary classifications:

Goncalves, Daciberg Lima Mod 2 homotopy-associative H-spaces. **(80g:55016)**
Nanda, Sribatsa Adams completion and Postnikov systems. **(80k:55020)**
Switzer, Robert M. Postnikov towers associated with complex 2-plane and symplectic line bundles. **(80k:55056)**

55S99 None of the above, but in this section

Cooke, George E. (*with* Smith, Larry) On realizing modules over the Steenrod algebra. **80h:55018**
Smith, Larry *See* **Cooke, George E., 80h:55018**

55Txx Spectral sequences [See also 18G40, 55R20.]

55T05 General

Secondary classifications:

Ta Man A generalization of spectral sequences. (Romanian. French summary) **(80g:18012)**

55T10 Serre spectral sequences

Legrand, André Calcul de la différentielle de la suite spectrale de Serre d'une fibration dont la base n'est pas simplement connexe. (English summary) **80c:55012**

55T15 Adams spectral sequences

Araki, Shôrô (*with* Murayama, Mitutaka) τ-cohomology theories. **80d:55022a**
Forgetful spectral sequences. **80d:55022b**
Bendersky, M. (*with* Curtis, E. B.) Cobordism of sequences of manifolds. **80f:55018**
(*with* Curtis, E. B.; Miller, Haynes R.) The unstable Adams spectral sequence for generalized homology. **80g:55035**
Bruner, R. Algebraic and geometric connecting homomorphisms in the Adams spectral sequence. **80e:55037**
Clarke, Francis On $\mathrm{Ext}_{K_*}^{(K)}(\pi_*(K), K_*(MU))$. **80f:55019**
Curtis, E. B. *See* **Bendersky, M., 80f:55018** *and* **Bendersky, M.; et al., 80g:55035**
Miller, Haynes R. *See* **Bendersky, M.; et al., 80g:55035**
Murayama, Mitutaka *See* **Araki, Shôrô, 80d:55022a**
Ravenel, Douglas C. A novice's guide to the Adams-Novikov spectral sequence. **80k:55057**
Tangora, Martin C. Generating Curtis tables. **80d:55023**
Some remarks on the lambda algebras. **80d:55024**

Secondary classifications:

Aubry, Marc Calcul de groupes d'homotopie stables mod p par la suite spectrale d'Adams-Novikov. Quelques différentielles de la suite spectrale d'Adams-Novikov. (English summary) **(80c:55014)**
Carlsson, Gunnar An Adams-type spectral sequence for change of rings. **(80c:18009)**
Morava, Jack The E_2-term of Novikov's spectral sequence. **(80k:55018)**

55T20 Eilenberg-Moore spectral sequences [See also 57T35.]

Dieng, Youssouf Sur un théorème de comparaison en algèbre homologique. (English summary) **80c:55013**
Gugenheim, V. K. A. M. On a modified Eilenberg-Moore theorem. **80k:55058**
Mori, Masamitsu The Steenrod operations in the Eilenberg-Moore spectral sequence. **80e:55038**
Retsh, V. S. Massey operations in Lie superalgebras and differentials of the Quillen spectral sequence. (Russian) **80d:55025**

Secondary classifications:

Schochet, Claude Acyclic ideals and Koszul complexes. **(80m:18007)**

55T25 Generalized cohomology

Aubry, Marc Calcul de groupes d'homotopie stables mod p par la suite spectrale d'Adams-Novikov. Quelques différentielles de la suite spectrale d'Adams-Novikov. (English summary) **80c:55014**

Secondary classifications:

Cohen, F. R. Braid orientations and bundles with flat connections. **(80b:57033)**
McLeod, John The Kunneth formula in equivariant K-theory. **(80m:55007)**

55T99 None of the above, but in this section

Lozano, M. T. The Fáry spectral sequence in K-theory. (Spanish. English summary) **80i:55011**

Secondary classifications:

Cohen, F. R. (*with* Taylor, Laurence R.) Computations of Gel'fand-Fuks cohomology, the cohomology of function spaces, and the cohomology of configuration spaces. **(80f:58050)**
Huber, Martin (*with* Meier, Willi) Cohomology and the derived functors of the inverse limit. **(80e:55010)**
Meier, Willi *See* **Huber, Martin, (80e:55010)**
Meyer, Jean-Pierre Acyclic models for multicomplexes. **(80b:55012)**
Miller, Haynes A spectral sequence for the homology of an infinite delooping. **(80g:55019)**
Taylor, Laurence R. *See* **Cohen, F. R., (80f:58050)**

55Uxx Applied homological algebra and category theory [See also 18Gxx.]

55U05 Abstract complexes

Secondary classifications:

Bognár, M. On complexes. **(80k:57036)**
Latch, Dana May (*with* Thomason, Robert W.; Wilson, W. Stephen) Simplicial sets from categories. **(80e:55012)**
Thomason, Robert W. *See* **Latch, Dana May; et al., (80e:55012)**
Wilson, W. Stephen *See* **Latch, Dana May; et al., (80e:55012)**

55U10 Semisimplicial complexes

Hardie, K. A. Kan lift-extensions in C. G. Haus. **80j:55024**
Ruiz, Roberto *See* **Ruiz Salguero, C., 80j:55025**
Ruiz Salguero, C. (*with* Ruiz, Roberto) Remarks about the Eilenberg-Zilber type decomposition in cosimplicial sets. **80j:55025**
Smirnov, V. A. Twisted Cartesian products. (Russian) **80e:55039**

55U15 Chain complexes

Kamps, Klaus Heiner Note on normal sequences of chain complexes. **80i:55019**

Secondary classifications:

Dyer, Micheal N. *See* **Sieradski, Allan J., (80k:20007)**
Gugenheim, V. K. A. M. On a modified Eilenberg-Moore theorem. **(80k:55058)**
Sieradski, Allan J. (*with* Dyer, Micheal N.) Distinguishing arithmetic for certain stably isomorphic modules. **(80k:20007)**

55U20 Universal coefficient theorems, Bockstein operator

55U25 Homology of a product, Künneth formula

Dula, G. (*with* Katz, E.) Computation of the homology of $\Omega(X \vee Y)$. **80m:55026**
Katz, E. *See* **Dula, G., 80m:55026**
Meyer, Jean-Pierre Acyclic models for multicomplexes. **80b:55012**

55U30 Duality

Baladze, D. O. The duality law for homology and cohomology K-groups. (Russian. English summary) **80h:55019**
Malgoire, Jean (*with* Voisin, Christine) Spectre d'un espace annelé et dualité de Stone généralisée. (English summary) **80j:55026**
Voisin, Christine *See* **Malgoire, Jean, 80j:55026**

55U35 Abstract homotopy theory

Secondary classifications:

Beck, Jon M. Simplicial sets and the foundations of analysis. **(80m:03029)**
Evrard, Marcel Homotopie des foncteurs en groupes. **(80h:18012)**
Frei, Armin (*with* Kleisli, Heinrich) A question in categorical shape theory: when is a shape-invariant functor a Kan extension? **(80k:18003)**
Fritsch, Rudolf (*with* Latch, Dana May) Homotopy inverses for nerve. **(80c:18010)**
Hastings, Harold M. Steenrod homotopy theory, homotopy idempotents, and homotopy limits. **(80k:55035)**
Kleisli, Heinrich *See* **Frei, Armin, (80k:18003)**
Latch, Dana May *See* **Fritsch, Rudolf, (80c:18010)**
Neisendorfer, Joseph Lie algebras, coalgebras and rational homotopy theory for nilpotent spaces. **(80b:55010)**

55U40 Topological categories

Nanda, Sribatsa Adams completion and Postnikov systems. **80h:55020**

Secondary classifications:

Ungar, Š. n-connectedness of inverse systems and applications to shape theory. (Serbo-Croatian summary) **(80e:55023)**

55U99 None of the above, but in this section

Morava, Jack Hypercohomology of topological categories. **80e:55040**

Secondary classifications:

Schochet, Claude Acyclic ideals and Koszul complexes. **(80m:18007)**

57–XX MANIFOLDS AND CELL COMPLEXES {For complex manifolds, see 32C10.}

57–01 Elementary exposition, textbooks

Burde, Gerhard Knoten. **80j:57001**
(Dorn, Gernot) *See* **Griffiths, H. B., 80h:57001**
Griffiths, H. B. ★Oberflächen. **80h:57001**
Lima, Elon Lages ★Variedades diferenciáveis. (Portuguese) [Differentiable manifolds] **80i:57001**
Whitley, William Glenn Manifolds. **80e:57001**

Secondary classifications:

Chern, Shiing Shen ★Complex manifolds without potential theory. **(80f:32001)**
Griffiths, H. B. The problem of the three languages, and the topology of surfaces. **(80c:00013)**
Waldhausen, Friedhelm Some problems on 3-manifolds. **(80g:57013)**
Zeitler, Herbert Die Sache mit den Möbius-Bändern. Wie ich Vertretungsstunden gestaltete—ein Erlebnisbericht. **(80j:00014)**

57–02 Advanced exposition (research surveys, monographs, etc.)

Burghelea, Dan Automorphisms of manifolds. **80g:57001**
Kirby, Robion C. Problems in low dimensional manifold theory. **80g:57002**

Secondary classifications:

Cannon, J. W. Shrinking cell-like decompositions of manifolds. Codimension three. **(80j:57013)**

57–03 Historical (must also be assigned at least one classification number from Section 01)

Kuiper, Nicolaas H. A short history of triangulation and related matters. **80i:57002**

Secondary classifications:

Raymond, Frank R. L. Wilder's work on generalized manifolds—an appreciation. **(80h:01023)**
Weil, André ★Oeuvres scientifiques. Collected papers. Vol. I (1926–1951). **(80k:01067a)**
(Wilder, R. L.) *See* **Raymond, Frank, (80h:01023)**
Bibliography:
Weil, André *See* **Weil, André, (80k:01067a)**
Wilder, Raymond Louis *See* **Raymond, Frank, (80h:01023)**
Biography:
Wilder, Raymond Louis *See* **Raymond, Frank, (80h:01023)**

57–04 Explicit machine computation and programs (not the theory of computation or programming)

57–06 Proceedings, conferences, etc.

(Cantrell, James C.) *See* **Geometric topology, 80d:57002**
(Fenn, Roger A.) *See* **Topology of low-dimensional manifolds, 80g:57005**
(Ivanov, A. A.) *See* **Studies in topology, 80c:57001**
(Milgram, R. James) *See* **Algebraic and geometric topology, 80d:57001a** *and* **Algebraic and geometric topology, 80d:57001b**

Algebraic and geometric topology ★Algebraic and geometric topology. Part 1. **80d:57001a**
★Algebraic and geometric topology. Part 2. **80d:57001b**
Athens, Ga. *See* **Geometric topology, 80d:57002**
Chelwood Gate *See* **Topology of low-dimensional manifolds, 80g:57005**
Conference:
Georgia, Topology *See* **Geometric topology, 80d:57002**
Sussex, Topology of Low-Dimensional Manifolds *See* **Topology of low-dimensional manifolds, 80g:57005**
Foliations *See* **Topology of foliations, 80g:57004**
Geometric topology ★Geometric topology. **80d:57002**
See also **Algebraic and geometric topology, 80d:57001a** *and* **Algebraic and geometric topology, 80d:57001b**
Knots and 3-manifolds ★Knots and 3-manifolds. (Japanese) **80g:57003**
Kyoto *See* **Knots and 3-manifolds, 80g:57003** *and* **Topology of foliations, 80g:57004**
Low-dimensional manifolds *See* **Topology of low-dimensional manifolds, 80g:57005**
Proceedings of Symposia in Pure Mathematics *See* **Algebraic and geometric topology, 80d:57001a** *and* **Algebraic and geometric topology, 80d:57001b**
Stanford, Calif. *See* **Algebraic and geometric topology, 80d:57001a** *and* **Algebraic and geometric topology, 80d:57001b**
Studies in topology ★Исследования по топологии. III. (Russian) [Studies in topology. III] **80c:57001**
Summer Research Institute:
American Mathematical Society *See* **Algebraic and geometric topology, 80d:57001a** *and* **Algebraic and geometric topology, 80d:57001b**
Symposium:
Knots and 3-manifolds *See* **Knots and 3-manifolds, 80g:57003**
Topology of Foliations *See* **Topology of foliations, 80g:57004**
Topology *See* **Studies in topology, 80c:57001** *and* **Geometric topology, 80d:57002**
Topology of foliations ★Topology of foliations. (Japanese) **80g:57004**
Topology of low-dimensional manifolds ★Topology of low-dimensional manifolds. **80g:57005**

Secondary classifications:

(Hoffman, Peter) *See* **Algebraic topology, (80k:55002)**
(Smith, Victor P.) *See* **Algebraic topology, (80k:55002)**
Algebraic topology ★Algebraic topology, Waterloo, 1978. **(80k:55002)**
Conference:
Algebraic Topology *See* **Algebraic topology, (80k:55002)**
Topology *See* **Algebraic topology, (80k:55002)**
Waterloo, Ont. *See* **Algebraic topology, (80k:55002)**

57Mxx Low-dimensional topology (old 55Axx)

57M05 Fundamental group, presentations, free differential calculus

Allenby, R. B. J. T. (*with* Boler, J.; Evans, B.; Moser, L. E.; Tang, C. Y.) Frattini subgroups of 3-manifold groups. **80b:57001**
Boler, J. *See* **Allenby, R. B. J. T.; et al., 80b:57001**
Evans, B. *See* **Allenby, R. B. J. T.; et al., 80b:57001**
Freedman, Michael Hartley Remarks on the solution of first degree equations in groups. **80b:57002**
Kearton, C. Signatures of knots and the free differential calculus. **80h:57002**
Maeda, Toru A unique decomposition for knot-like groups. **80h:57003**
Moser, L. E. *See* **Allenby, R. B. J. T.; et al., 80b:57001**
Raymond, Frank (*with* Wigner, David) Constructions of aspherical manifolds. **80d:57003**
Styšev, V. B. Taking the root in the braid group. (Russian) **80j:57002**
Tang, C. Y. *See* **Allenby, R. B. J. T.; et al., 80b:57001**
Wigner, David *See* **Raymond, Frank, 80d:57003**

Secondary classifications:

Auslon, Joachim Einige endliche Faktorgruppen der Zopfgruppen. **(80k:20036)**
Bass, Hyman Variations on the modular group. **(80f:20052)**
Cohen, Joel M. Complexes of cohomological dimension two. **(80f:57001)**
Ferri, Massimo A non-Cayleyian diagram for presentations of groups. **(80i:05045)**
Goldstein, Richard Z. (*with* Turner, Edward C.) Applications of topological graph theory to group theory. **(80g:20050)**
Hansen, Vagn Lundsgaard Polynomial covering spaces and homomorphisms into the braid groups. **(80m:32013)**
Hubbard, John *See* **Pourezza, Ibrahim, (80h:14023)**
Jajodia, Sushil On 2-dimensional CW-complexes with a single 2-cell. **(80k:57005)**
Johnson, Francis E. A. On Poincaré duality groups of poly-linear type and their realisations. **(80c:20056)**
Müller, Heinz Groupes et paires de groupes à dualité de Poincaré de dimension 2. (English summary) **(80i:20017)**
Oka, Mutsuo On the fundamental group of the complement of certain plane curves. **(80d:14017)**
Pourezza, Ibrahim (*with* Hubbard, John) The space of closed subgroups of $\mathbf{R}^2$. **(80h:14023)**
Shalen, Peter B. Linear representations of certain amalgamated products. **(80e:20011)**
Turner, Edward C. *See* **Goldstein, Richard Z., (80g:20050)**

57M10 Covering spaces

Berstein, Israel (*with* Edmonds, Allan L.) On the construction of branched coverings of low-dimensional manifolds. **80b:57003**
DeGeorge, David L. (*with* Reddy, William L.) A Hopf inequality for branch sets. **80a:57002**
Domergue, Michel Remarques à propos d'un lemme de R. H. Fox, le groupe fondamental d'un revêtement ramifié. (English summary) **80a:57003**
Edmonds, Allan L. The degree of a branched covering of a sphere. **80e:57002**
See also **Berstein, Israel, 80b:57003**
Kulkarni, Ravindra S. Infinite regular coverings. **80c:57002**
Montesinos Amilibia, José María 4-manifolds, 3-fold covering spaces and ribbons. **80k:57001**
Reddy, William L. *See* **DeGeorge, David L., 80a:57002**

Secondary classifications:

Goldsmith, Deborah L. A linking invariant of classical link concordance. **(80h:57005)**
Samuky, Stanley R. Finite covers and modules of functions. **(80g:32029)**
Takahashi, Moto-o An alternative proof of Birman-Hilden-Viro's theorem. **(80e:57009)**

57M12 Special coverings, e.g. branched

Edmonds, Allan L. Deformation of maps to branched coverings in dimension two. **80i:57003**
Hilden, Hugh M. (*with* Montesinos Amilibia, José María) A method of constructing 3-manifolds and its application to the computation of the μ-invariant. **80e:57003**
Embeddings and branched covering spaces for three and four dimensional manifolds. **80k:57002**
Hirsch, Ulrich Bordismus verzweigter Überlagerungen von niedrigdimensionalen Sphären. (English summary) **80g:57006**
Montesinos Amilibia, José María *See* **Hilden, Hugh M., 80e:57003**
Zarrow, Robert Orientation reversing square roots of involutions. **80k:57003a**
Orientation reversing maps of surfaces. **80k:57003b**

Secondary classifications:

Edmonds, Allan L. Extending a branched covering over a handle. **(80j:57022)**
Ferri, Massimo Crystallisations of 2-fold branched coverings of S^3. **(80k:57037)**
Wood, John W. Complete intersections as branched covers and the Kervaire invariant. **(80h:14025)**

57M15 Relations with graph theory [See also 05Cxx.]

Asimow, L. (*with* Roth, B.) The rigidity of graphs. **80i:57004a**
(*with* Roth, B.) The rigidity of graphs. II. **80i:57004b**
Jendrol', Stanislav On the face-vectors and vertex-vectors of maps. **80c:57003**
Pachner, Udo Schnitt- und Überdeckungszahlen kombinatorischer Sphären. **80c:57004**
Roth, B. *See* **Asimow, L., 80i:57004a** *and* **Asimow, L., 80i:57004b**

Secondary classifications:

Dambit, Ja. Ja. An algorithm for superimposing a nonplanar graph onto several surfaces. (Russian) **(80b:05024)**
Demaria, D. C. Relations between the regular homotopy of graphs and the classical homotopy of polyhedra. (Italian. English summary) **(80i:55013)**
Ferri, Massimo Crystallisations of 2-fold branched coverings of S^3. **(80k:57037)**
Goodman, Jacob Eli (*with* Onishi, Hironori) Even triangulations of S^3 and the coloring of graphs. **(80a:05092)**
Joachim, Egon Minimale nicht in die Ringfläche einbettbare Graphen. **(80a:05079)**
Jungerman, Mark The non-orientable genus of the n-cube. **(80e:05055)**
Onishi, Hironori *See* **Goodman, Jacob Eli, (80a:05092)**

57M20 Two-dimensional complexes

Cohen, Joel M. Complexes of cohomological dimension two. **80f:57001**
Ho, Chung Wu On the space of the linear homeomorphisms of a polyhedral N-cell with two interior vertices. **80k:57004**
Jajodia, Sushil On 2-dimensional CW-complexes with a single 2-cell. **80k:57005**
Jendrol', Stanislav (*with* Jucovič, Ernest) Generalization of a theorem by V. Eberhard. (Russian summary) **80k:57006**
Jucovič, Ernest *See* **Jendrol', Stanislav, 80k:57006**

Secondary classifications:

Brown, Edward M. (*with* Messer, Robert) The classification of two-dimensional manifolds. **(80j:57007)**
Connelly, Robert The rigidity of polyhedral surfaces. **(80k:53089)**
Messer, Robert *See* **Brown, Edward M., (80j:57007)**

57M25 Knots and links in S^3 (For higher dimensions, see 57Q45.)

Akbulut, Selman (*with* Kirby, Robion C.) Mazur manifolds. **80h:57004**
Birman, Joan S. A representation theorem for fibered knots and their monodromy maps. **80k:57007**
Brakes, W. R. On certain nontrivial ribbon knots. **80k:57008**
Cairns, Stewart S. Canonical knot projections and double point structures. **80k:57009**
Fenn, Roger A. (*with* Taylor, Paul) Introducing doodles. **80k:57010**
(*with* Rourke, Colin) On Kirby's calculus of links. **80c:57005**
Feustel, C. D. (*with* Whitten, Wilbur) Groups and complements of knots. **80b:57004**
Goldsmith, Deborah L. A linking invariant of classical link concordance. **80h:57005**
Concordance implies homotopy for classical links in M^3. **80k:57006**
Gordon, C. McA. Some aspects of classical knot theory. **80f:57002**
Hillman, Jonathan A. Longitudes of a link and principality of an Alexander ideal. **80c:57006**
Johnson, Dennis L. Homomorphs of knot groups. **80j:57004**
Kidwell, Mark E. On the Alexander polynomials alternating two-component links. **80g:57007**

Kirby, Robion C. (*with* Lickorish, W. B. Raymond) Prime knots and concordance. **80k:57011**
See also **Akbulut, Selman, 80h:57004**
Kondo, Hisako Knots of unknotting number 1 and their Alexander polynomials. **80g:57008**
Lickorish, W. B. Raymond *See* **Kirby, Robion C., 80k:57011**
Litherland, R. A. Signatures of iterated torus knots. **80k:57012**
Surgery on knots in solid tori. **80l:57005**
Myers, Robert Open book decompositions of 3-manifolds. **80a:57004**
Ochiai, Mitsuyuki Dehn's surgery along 2-bridge knots. **80d:57004**
Quach thi Cäm Vå Polynôme d'Alexander des noeuds fibrés. (English summary) **80j:57003**
Rourke, Colin *See* **Fenn, Roger A., 80c:57005**
Row, W. H. An algebraic characterization of connected sum factors of closed 3-manifolds. **80g:57009**
Stallings, John R. Constructions of fibred knots and links. **80e:57004**
Stillwell, John C. The compound crossing number of a knot. **80e:57005**
Taylor, Paul *See* **Fenn, Roger A., 80k:57010**
Whitten, Wilbur *See* **Feustel, C. D., 80b:57004**

Secondary classifications:

Amion, Joachim A proof of a theorem of Coxeter. **(80l:20018)**
Berridge, P. H. (*with* Dunwoody, M. J.) Nonfree projective modules for torsion-free groups. **(80k:20041)**
Burde, Gerhard Knoten. **(80j:57001)**
Dunwoody, M. J. *See* **Berridge, P. H., (80k:20041)**
Homma, Tatsuo (*with* Ochiai, Mitsuyuki) On relations of Heegaard diagrams and knots. **(80b:57009)**
Little, John A. Space curves with positive torsion. **(80k:53002)**
Ochiai, Mitsuyuki *See* **Homma, Tatsuo, (80b:57009)**
Smythe, N. F. The Burau representation of the braid group is pairwise free. **(80m:20037)**
Stillwell, John C. Isotopy in surface complexes from the computational viewpoint. **(80j:03059)**
Unsolvability of the knot problem for surface complexes. **(80j:03060)**
Swarup, G. A. On a theorem of Johannson. **(80c:57007)**
Ţarină, M. Sur les invariants de G. Călugăreanu. **(80f:53005)**
Turaev, V. G. Intersections of loops in two-dimensional manifolds. (Russian) **(80d:57019)**

57M30 Wild knots and surfaces, etc., wild imbeddings

Secondary classifications:

Garza, Gene G. Homogeneity by isotopy. **(80k:57030)**
Harrold, O. G. An additive index theorem for certain wildly embedded arcs and curves. **(80h:57012)**
A problem of Rushing. **(80l:57009)**
Oka, Mutsuo On the fundamental group of the complement of certain plane curves. **(80d:14017)**
Sinai, F. R. A homeomorphism classification of wildly imbedded two-spheres in S^3. **(80h:57015)**

57M35 Dehn's Lemma, sphere theorem, loop theorem, asphericity

Matsumoto, Yukio (*with* Venema, Gerard A.) Failure of the Dehn lemma on contractible 4-manifolds. **80k:57013**
Poénaru, V. The three big theorems of Papakyriakopoulos. **80d:57005**
Venema, Gerard A. *See* **Matsumoto, Yukio, 80k:57013**

57M40 Characterizations of E^3 and S^3 (Poincaré conjecture) [See also 57N12.]

Secondary classifications:

Ochiai, Mitsuyuki A counterexample to a conjecture of Whitehead and Volodin-Kuznetsov-Fomenko. **(80j:57012)**

57M99 None of the above, but in this section

Akbulut, Selman A note on homology surgery and the Casson-Gordon invariant. **80j:57005**
César de Sá, Eugénia (*with* Rourke, Colin) The homotopy type of homeomorphisms of 3-manifolds. **80j:57006**
Rourke, Colin *See* **César de Sá, Eugénia, 80j:57006**

Secondary classifications:

Hubbard, John *See* **Pourezza, Ibrahim, (80e:14023)**
Marciniak, Zbigniew Poincaré duality groups with one defining relation. (Russian summary) **(80k:20042)**
Marden, A. (*with* Maskit, B.) On the isomorphism theorem for Kleinian groups. **(80f:30037)**
Maskit, B. *See* **Marden, A., (80f:30037)**
Nikulin, V. V. Integer symmetric bilinear forms and some of their geometric applications. (Russian) **(80j:10031)**
Pourezza, Ibrahim (*with* Hubbard, John) The space of closed subgroups of $\mathbf{R}^2$. **(80e:14023)**

57Nxx Topological manifolds

57N05 Topology of E^2, 2-manifolds

Brown, Edward M. (*with* Messer, Robert) The classification of two-dimensional manifolds. **80j:57007**
Daverman, Robert J. Shrinkable decompositions of nonmetric manifolds can produce other manifolds. **80l:57006**
Hemion, Geoffrey On the classification of homeomorphisms of 2-manifolds and the classification of 3-manifolds. **80f:57003**
Horňák, Mirko A theorem on nonexistence of a certain type of nearly regular cell-decompositions of the sphere. (Czech summary) **80h:57007**
Johnson, Dennis L. Homeomorphisms of a surface which act trivially on homology. **80h:57006**
Kosiowski, Czes Symmetries of surfaces. **80h:57009**
McGrew, J. Michael An unusual example of a sphere. **80h:57010**
Messer, Robert *See* **Brown, Edward M., 80j:57007**
Morin, Bernard (*with* Petit, Jean-Pierre) Problématique du retournement de la sphère. (English summary) **80b:57005**
Petit, Jean-Pierre Le retournement non trivial du tore. (English summary) **80b:57006**
See also **Morin, Bernard, 80b:57005**
Rogers, C. A. The topological classification of open co-countable subsets of S^2. **80d:57006**
Segal, Jack Refinable maps on 2-manifolds. **80m:57001**
Wills, Jörg M. Berandete 2-Mannigfaltigkeiten aus zwei ebenen Polygonen. **80l:57007**
Wilson, Steve The smallest nontoroidal chiral maps. **80b:57007**

Secondary classifications:

Borwein, Jonathan M. Monochrome lines in the plane. **(80b:54009)**
Edmonds, Allan L. Deformation of maps to branched coverings in dimension two. **(80l:57003)**
Ingram, W. T. Hereditarily indecomposable tree-like continua. **(80l:54044)**
Leschinger, Karl Über Fixpunkte holomorpher Automorphismen. (English summary) **(80e:55005)**
Patterson, David B. The fundamental group of the modulus space. **(80g:32042)**
Ritter, Gerhard X. A characterization of almost periodic homeomorphisms on the 2-sphere and the annulus. **(80k:54072)**
Švarcman, O. V. *See* **Vinberg, È. B., (80k:30047)**
Vinberg, È. B. (*with* Švarcman, O. V.) Riemann surfaces. (Russian) **(80k:30047)**
Zeitler, Herbert Die Sache mit den Möbius-Bändern. Wie ich Vertretungsstunden gestaltete—ein Erlebnisbericht. **(80j:00014)**

57N10 Topology of general 3-manifolds [See also 57Mxx.]

Altshuler, Amos 3-pseudomanifolds with preassigned links. **80h:57011**
Asano, Koshei Homeomorphisms of prism manifolds. **80k:57014**
Bing, R. H. (*with* Starbird, Michael) A decomposition of S^3 with a null sequence of cellular arcs. **80l:57008**
Birman, Joan S. (*with* Powell, Jerome) Special representations for 3-manifolds. **80g:57010**
Brown, Edward M. Contractible 3-manifolds of finite genus at infinity. **80g:57011**
Clark, Bradd Evans Surgery on links containing a cable sublink. **80b:57008**
Everett, Dan Shrinking countable decompositions of E^3 into points and tame cells. **80e:57006**
Fomenko, A. T. *See* **Volodin, I. A., 80h:57014**
Gardiner, C. *See* **Rubinstein, J. H., 80j:57010**
Gilmore, Maurice Three-dimensional open books constructed from the identity map. **80e:57007**
Harrold, O. G. An additive index theorem for certain wildly embedded arcs and curves. **80h:57012**
A problem of Rushing. **80l:57009**
Homma, Tatsuo (*with* Ochiai, Mitsuyuki) On relations of Heegaard diagrams and knots. **80b:57009**
Humphries, Stephen P. Generators for the mapping class group. **80l:57010**
Ivanov, N. V. Homotopies of automorphism spaces of some three-dimensional manifolds. (Russian) **80k:57015**
Jaco, William (*with* Shalen, Peter B.) A new decomposition theorem for irreducible sufficiently-large 3-manifolds. **80j:57008**
(*with* Shalen, Peter B.) Seifert fibered spaces in 3-manifolds. **80k:57016**
(*with* Myers, Robert) An algebraic determination of closed orientable 3-manifolds. **80g:57012**
Johannson, Klaus On exotic homotopy equivalences of 3-manifolds. **80m:57002**
On the mapping class group of simple 3-manifolds. **80m:57003**
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Neumann, Walter D. (*with* Raymond, Frank) Seifert manifolds, plumbing, μ-invariant and orientation reversing maps. **80e:57008**
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On 3-manifolds that have finite fundamental group and contain Klein bottles. **80f:57004**
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Some problems on 3-manifolds. **80g:57013**
Wielenberg, Norbert The structure of certain subgroups of the Picard group. **80b:57010**
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Ferri, Massimo Crystallisations of 2-fold branched coverings of S^3. **(80k:57037)**
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Hemion, Geoffrey On the classification of homeomorphisms of 2-manifolds and the classification of 3-manifolds. **(80f:57003)**
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Row, W. H. An algebraic characterization of connected sum factors of closed 3-manifolds. **(80g:57009)**
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Zimmermann, Bruno *See* Zieschang, Heiner, **(80k:57025)**

57N12 Topology of E^3 and S^3 [See also 57M40.]

Ochiai, Mitsuyuki A counterexample to a conjecture of Whitehead and Volodin-Kuznetsov-Fomenko. **80j:57012**
Sinal, F. R. A homeomorphism classification of wildly imbedded two-spheres in S^3. **80h:57015**
Starbird, Michael Cell-like 0-dimensional decompositions of E^3. **80h:57016**

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Wright, David G. Cantor sets in 3-manifolds. **(80j:57011)**

57N15 Topology of E^n, n-manifolds $(3<n<\infty)$

Akbulut, Selman (*with* Kirby, Robion C.) An exotic involution of S^4. **80m:57006**
Brakes, W. R. Homogeneity of $S^2\times T^2$. **80m:57007**
Cannon, J. W. Shrinking cell-like decompositions of manifolds. Codimension three. **80j:57013**
Church, P. T. Discrete maps on manifolds. **80g:57014**
Dancis, Jerome General position maps for topological manifolds. **80k:57021**
Daverman, Robert J. (*with* Singh, Sukhjit) On factors of closed cells. (Russian summary) **80c:57008**
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Ikeda, Hiroshi Note on the 4-manifolds in $\tilde{C}(p, 2)$ with $p>1$. **80e:57011**
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Mitchell, W. J. R. Absolute suspensions and cones. **80g:57017**
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Montesinos Amilibia, José María 4-manifolds, 3-fold covering spaces and ribbons. **(80k:57001)**
Singh, Sukhjit A linking axiom and retracts. (Russian summary) **(80g:54022)**
Venema, Gerard A. *See* Matsumoto, Yukio, **(80k:57013)**

57N17 Topology of topological vector spaces

Gutman, S. M. Homeomorphisms of nonseparable B-spaces. I. (Russian) **80b:57011**
Vo Thanh Liem A counterexample in l_2-manifold theory. **80g:57018**

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Mankiewicz, Piotr Fat equicontinuous groups of homeomorphisms of linear topological spaces and their application to the problem of isometries in linear metric spaces. **(80g:46004)**

57N20 Topology of infinite-dimensional manifolds [See also 58Bxx.]

Berstein, Israel (*with* West, J. E.) Based free compact Lie group actions on Hilbert cubes. **80k:57025**
Černi, Zvonko Hilbert cube modulo an arc. **80k:57019**
Chapman, T. A. (*with* Ferry, Steve) Fibering Hilbert cube manifolds over ANRs. **80c:57010**
Curtis, D. W. (*with* Kozlowski, G.) Brick decompositions and Q-manifolds. **80d:57009**
(*with* Vo Thanh Liem) Infinite products which are homeomorphic to Hilbert space. **80h:57020**
Dobrowolski, Tadeusz Extension of Bessaga's negligibility technique to certain infinite-dimensional groups. (Russian summary) **80k:57026**
Ferry, Steve On a space of group actions. **80k:57021**
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Kozlowski, G. *See* Curtis, D. W., **80d:57009**
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van Mill, Jan A pseudo-interior of λI. **80a:57005**
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Toruńczyk, H. Concerning locally homotopy negligible sets and characterization of l_2-manifolds. **80g:57019**
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Chapman, T. A. Constructing locally flat embeddings of infinite-dimensional manifolds without tubular neighborhoods. **(80d:58004)**
Curtis, D. W. (*with* Schori, R. M.) Hyperspaces of Peano continua are Hilbert cubes. **(80k:54010)**
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Eberhart, Carl Intervals of continua which are Hilbert cubes. **(80e:54042)**
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Rubin, Leonard R. (*with* Schori, R. M.; Walsh, John J.) New dimension-theory techniques for constructing infinite-dimensional examples. **(80e:54049)**
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Wong, Raymond Y. Cyclic group actions on Q and Hurewicz fibration. **(80k:57072)**

57N25 Shapes [See also 54C56, 54F43, 55P55, 55Q07.]

Černi, Zvonko $\mathcal{C}_p$-movable at infinity spaces, compact ANR divisors and property *UVW*^{n}. **80c:54013**

Duvall, P. F. (*with* Husch, Lawrence S.) Fundamental dimension of fibers of approximate fibrations. **80k:57028**
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Husch, Lawrence S. Intersections of ANR's. **(80m:55014)**
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Walsh, John J. Isotoping mappings to open mappings. **(80m:57008)**

57N30 Engulfing

57N35 Imbeddings and immersions

Brakes, W. R. Quickly unknotting topological spheres. **80a:57006**
Cappell, Sylvain E. (*with* Shaneson, Julius L.) An introduction to embeddings, immersions and singularities in codimension two. **80e:57013**
Shaneson, Julius L. *See* **Cappell, Sylvain E., 80e:57013**

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57N37 Isotopy and pseudo-isotopy

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Asano, Kouhei Homeomorphisms of prism manifolds. **(80k:57014)**
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57N40 Neighborhoods of submanifolds

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Sinal, F. R. A homeomorphism classification of wildly imbedded two-spheres in S^3. **(80k:57015)**

57N45 Flatness and tameness

Daverman, Robert J. (*with* Pax, S. A.) Cross-sectionally simple spheres can be wild. **80e:57014**
Garza, Gene G. Local spanning missing loops. **80k:57029**
Homogeneity by isotopy. **80k:57030**
Matsumoto, Yukio Wild embeddings of piecewise linear manifolds in codimension two. **80i:57012**
Pax, S. A. *See* **Daverman, Robert J., 80e:57014**
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57N50 $S^{n-1} \subset E^n$, Schoenflies problem

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Guggenheimer, H. The Jordan and Schoenflies theorems in axiomatic geometry. **(80a:51008)**

57N55 Microbundles and block bundles [See also 55R60, 57Q50.]

Edmonds, Allan L. Fibering topological manifolds. **80h:57023**

57N60 Cellularity

Daverman, Robert J. Embedding phenomena based upon decomposition theory: wild Cantor sets satisfying strong homogeneity properties. **80k:57031**
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Daverman, Robert J. A nonshrinkable decomposition of S^n determined by a null sequence of cellular sets. **(80j:57015)**
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57N65 Algebraic topology of manifolds

Conner, P. E. (*with* Raymond, Frank) Realizing automorphisms of π_1 by homeomorphisms. **80e:57015**
Friedrich, Th. Eine Bemerkung über das Produkt im Kohomologierung von π-Mannigfaltigkeiten. **80g:57020**
Gottlieb, Daniel Henry Partial transfers. **80h:57024**
McCrory, Clint Geometric homology operations. **80j:57016**
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Zimmermann, Bruno *See* **Zieschang, Heiner, 80h:57025**

57N70 Cobordism and concordance

Hausmann, Jean-Claude (*with* Vogel, Pierre) The plus construction and lifting maps from manifolds. **80e:57016**
Vogel, Pierre *See* **Hausmann, Jean-Claude, 80e:57016**

57N75 General position and transversality

Matumoto, Takao (*with* Siebenmann, L.) The topological s-cobordism theorem fails in dimension 4 or 5. **80b:57012**
Siebenmann, L. *See* **Matumoto, Takao, 80b:57012**

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Pixley, Carl P. A note on the dimensions of projections of cells in E^n. **(80k:57023)**

57N80 Stratifications

Anderson, Douglas R. A triangulable space which possesses no natural piecewise linear structure. **80a:57007**

57N99 None of the above, but in this section

Cappell, Sylvain E. (*with* Shaneson, Julius L.) Nonlinear similarity of matrices. **80m:57010**
Malgoire, Jean (*with* Voisin, Christine) Découpe d'un espace topologique suivant un fermé. (English summary) **80k:57033**
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57Pxx Generalized manifolds [See also 18F15.]

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Raymond, Frank R. L. Wilder's work on generalized manifolds—an appreciation. **(80h:01023)**
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57P05 Local properties

57P10 Poincaré duality spaces

Dominguez Murillo, Eladio Geometrical Poincaré duality. **80m:57011**
Hambleton, Ian (*with* Milgram, R. James) Poincaré transversality for double covers. **80j:57017**
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Milgram, R. James (*with* Hambleton, Ian) An obstruction to Poincaré transversality. **80k:57034**
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Sasao, Seiya (*with* Takahashi, Hideo) Highly connected Poincaré complexes. **80k:57035**
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57Qxx PL-topology

57Q05 The general topology of complexes

Bognár, M. On complexes. **80k:57036**
Danaraj, Gopal (*with* Klee, Victor) Which spheres are shellable? **80b:57013a**
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Dyer, Micheal N. On the essential height of homotopy trees with finite fundamental group. **80e:57018**
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57Q10 Simple homotopy type, Whitehead torsion, Reidemeister-Franz torsion, etc.

Edwards, Robert D. On the topological invariance of simple homotopy type for polyhedra. **80a:57008**
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Anderson, Douglas R. A triangulable space which possesses no natural piecewise linear structure. **(80a:57007)**
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57Q15 Triangulating manifolds

Ferri, Massimo Crystallisations of 2-fold branched coverings of S^3. **80k:57037**
Galewski, David E. (*with* Stern, Ronald J.) Simplicial triangulations of topological manifolds. **80m:57014**
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Matumoto, Takao Triangulation of manifolds. **80e:57019**
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57Q20 Cobordism

57Q25 Comparison of PL-structures: classification, Hauptvermutung

Matumoto, Takao On homotopy equivalences of $S^2 \times \mathbf{R}P^2$ to itself. **80j:57019**

57Q30 Engulfing

Luukkainen, Jouni (*with* Väisälä, J.) Elements of Lipschitz topology. **80h:57015**
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57Q35 Imbeddings and immersions

Cappell, Sylvain E. (*with* Shaneson, Julius L.) Embeddings and immersions of four-dimensional manifolds in $\mathbf{R}^6$. **80i:57014**
Homer, William D. Singularities in lens spaces. **80e:57020**
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57Q37 Isotopy

57Q40 Regular neighborhoods

57Q45 Knots and links (in high dimensions) {For the low-dimensional case, see 57M25.}

Bayer, Eva (*with* Michel, Françoise) Finitude du nombre des classes d'isomorphisme des structures isometriques entières. **80m:57015**
César de Sá, Eugénia A link calculus for 4-manifolds. **80k:57039**
Hausmann, Jean-Claude Noeuds antisimples. **80j:57020**
(*with* Kervaire, Michel) Sur le centre des groupes de noeuds multidimensionnels. (English summary) **80c:57011**
Hirschhorn, Philip S. On the "stable" homotopy type of knot complements. **80k:57040**
Hitt, L. R. Examples of higher-dimensional slice knots which are not ribbon knots. **80k:57041**
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Kawauchi, Akio On n-manifolds whose punctured manifolds are imbeddable in $(n+1)$-spheres and spherical manifolds. **80g:57024**
Kervaire, Michel (*with* Weber, Claude) A survey of multidimensional knots. **80f:57009**
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Kirby, Robion C. (*with* Scharlemann, Martin) Eight faces of the Poincaré homology 3-sphere. **80k:57042**
Levine, Jerome Some results on higher dimensional knot groups. **80j:57021**
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See also Kervaire, Michel, **80f:57009** *and* Levine, Jerome, **80j:57021**

Secondary classifications:

Cappell, Sylvain E. (*with* Shaneson, Julius L.) An introduction to embeddings, immersions and singularities in codimension two. **(80e:57013)**
Durfee, Alan H. Fifteen characterizations of rational double points and simple critical points. **(80m:14003)**
Fomenko, A. T. *See* Volodin, I. A., **(80k:57014)**
Nežinskiĭ, V. M. Suspended sequences in the theory of links. (Russian) **(80k:57054)**
Ocken, Stanley Perturbing embeddings in codimension two. **(80h:57028)**
Randell, Richard The Milnor number of some isolated complete intersection singularities with C^*-action. **(80a:32008)**
On the topology of nonisolated singularities. **(80f:14002)**
Shaneson, Julius L. *See* Cappell, Sylvain E., **(80e:57013)**
Vogt, Renate Cobordismus von Knoten. **(80k:57065)**
Volodin, I. A. (*with* Fomenko, A. T.) Manifolds. Knots. Algorithms. (Russian) **(80h:57014)**
Wintgen, Peter On the total curvature of surfaces in E^4. **(80f:53037)**

57Q50 Microbundles and block bundles [See also 55R60, 57N55.]

Secondary classifications:

Domingoez Murillo, Eladio Geometrical Poincaré duality. **(80m:57011)**

57Q55 Approximations

Scharlemann, Martin Approximating CAT CE maps by CAT homeomorphisms. **80g:57027**
Venema, Gerard A. Approximating disks in 4-space. **80d:57011**

Secondary classifications:

McCrory, Clint Geometric homology operations. **(80j:57016)**
Samylovskiĭ, A. I. (*with* Sušков, B. G.) Piecewise linear approximation of a nonconvex set by a polyhedron. (Russian) **(80g:65012)**
Scharlemann, Martin Smooth CE maps and smooth homeomorphisms. **(80k:57016)**
Sušков, B. G. *See* Samylovskiĭ, A. I., **(80g:65012)**

57Q60 Cobordism and concordance

Secondary classifications:

Domínguez Murillo, Eladio Geometrical Poincaré duality. **(80m:57011)**
Neumann, Walter D. (*with* Weintraub, Steven H.) Four-manifolds constructed via plumbing. **(80g:57047)**
Weintraub, Steven H. *See* **Neumann, Walter D., (80g:57047)**

57Q65 General position and transversality

Berkowitz, H. W. (*with* Roy, Prabir) General positioning in a mapping cylinder. **80g:57028**
Jones, Lowell Geometric construction for $Z_{(\alpha)}$-homology manifolds. **80k:57044**
McCrory, Clint Stratified general position. **80m:57016**
Roy, Prabir *See* **Berkowitz, H. W., 80g:57028**

Secondary classifications:

Singhof, Wilhelm Minimal coverings of manifolds with balls. **(80k:55012)**

57Q99 None of the above, but in this section

Edmonds, Allan L. Extending a branched covering over a handle. **80j:57022**
Levitt, Norman The PL Grassmannian and PL curvature. **80k:57045**
Penna, Michael A. On the geometry of combinatorial manifolds. **80f:57010**
Starbird, Michael Flexible regular neighborhoods for complexes in E^3. **80k:57046**

Secondary classifications:

Gabrièlov, A. M. Combinatorial formulas for Pontrjagin classes and GL-invariant chains. (Russian) **(80b:57018)**
Goldberg, Michael Unstable polyhedral structures. **(80b:52013)**
Kahn, Peter J. Counting types of rigid frameworks. **(80m:51008)**
Libgober, Anatoly On the topology of some even-dimensional algebraic hypersurfaces. **(80k:14033)**
Singhof, Wilhelm Minimal coverings of manifolds with balls. **(80k:55012)**

57Rxx Differential topology {For foundational questions of differentiable manifolds, see 58Axx; for infinite-dimensional manifolds, see 58Bxx.}

57R05 Triangulating

Scharlemann, Martin Transverse Whitehead triangulations. **80k:57047**

57R10 Smoothing

Feshbach, Mark The transfer and compact Lie groups. **80k:55049**
Lashof, R. (*with* Rothenberg, Mel) G-smoothing theory. **80h:57030**
Rees, Elmer (*with* Thomas, Emery) Smoothings of isolated singularities. **80e:57021**
Rothenberg, Mel *See* **Lashof, R., 80h:57030**
Thomas, Emery *See* **Rees, Elmer, 80e:57021**

Secondary classifications:

Ehrlich, Karel Fibrations and a transfer map in algebraic K-theory. **(80g:55031)**
Fukuhara, Shinji On the invariant for a certain type of involutions of homology 3-spheres and its application. **(80g:57046)**
Johnson, Francis E. A. On the realisability of polysurface groups. **(80g:55013)**
Pedersen, Erik Kjaer Smoothings of H-spaces. **(80e:55017)**
Smoothing H-spaces. **(80d:55012)**
Teleman, Nicolae Global analysis on PL-manifolds. **(80k:58091)**

57R12 Smooth approximations

Scharlemann, Martin Smooth CE maps and smooth homeomorphisms. **80b:57016**

57R15 Specialized structures on manifolds (spin manifolds, frame manifolds, etc.)

Akbulut, Selman Algebraic equations for a class of P. L. spaces. **80a:57009**
Brotherton, Neil Some parallelizable four-manifolds not admitting a complex structure. **80e:57022**
Kulkarni, Ravindra S. P. A. Smith-theoretic algebro-geometric invariants of compact differentiable manifolds. **80d:57012**
Mandelbaum, Richard Irrational connected sums and the topology of algebraic surfaces. **80e:57023**

Secondary classifications:

Libgober, Anatoly On the topology of some even-dimensional algebraic hypersurfaces. **(80k:14033)**
Morita, Shigeyuki Invariants of almost complex structures and their applications. (Japanese) **(80e:32009)**
L-equivalence classes of submanifolds in complex projective spaces. **(80f:32036)**
Narita, Fumio (*with* Takahashi, Takao; Toki, Yasunori; Yamagata, Masahiro) On some relation of curvature between Brieskorn manifolds and standard sphere. **(80j:53048)**
Neumann, Walter D. Signature related invariants of manifolds. I. Monodromy and γ-invariants. **(80k:57048)**
Takahashi, Takao *See* **Narita, Fumio; et al., (80j:53048)**
Toki, Yasunori *See* **Narita, Fumio; et al., (80j:53048)**
Vaisman, Izu On the Sasaki-Hsu contact structure of the Brieskorn manifolds. **(80b:53028)**
Yamagata, Masahiro *See* **Narita, Fumio; et al., (80j:53048)**

57R20 Characteristic classes and numbers

Albert, Claude Classes caractéristiques des immersions sans torsion. (English summary) **80b:57017**
Banchoff, T. (*with* McCrory, Clint) A combinatorial formula for normal Stiefel-Whitney classes. **80h:57031**
Ciliberto, Ciro On the Euler-Poincaré characteristic of complete intersections in CP^r, with an isolated singularity. (Italian. English summary) **80f:57011**
Dedò, Maria Cobordism characteristic classes. (Italian summary) **80e:57024**
Didierjean, André Classes de cohomologie invariantes par cobordisme et classes de cobordisme se fibrant sur des sphères. (English summary) **80k:57017**
Feshbach, Mark The transfer and characteristic classes. **80f:57012**
Gabrièlov, A. M. Combinatorial formulas for Pontrjagin classes and GL-invariant chains. (Russian) **80b:57018**
Hegenbarth, Friedrich An application of the ρ-invariant. **80g:57029**
Jones, Lowell Two characteristic classes and Smith theory. **80g:57030**
MacPherson, Robert Characteristic classes for singular varieties. **80g:57031**
Marry, Pierre (*with* Verdier, Jean-Louis) Quelques problèmes d'intersections en géométrie riemannienne. **80e:57012**
Mazzocco, Renzo More on the characteristic ring of extensions of Lie algebras. (Italian. English summary) **80m:57017**
McCrory, Clint *See* **Banchoff, T., 80h:57031**
Neumann, Walter D. ★Equivariant Witt rings. **80a:57010**
Signature related invariants of manifolds. I. Monodromy and γ-invariants. **80k:57048**
Papastavridis, Stavros A note on the integrability of characteristic classes. (Greek summary) **80g:57032**
On killing characteristic classes by cobordism. **80j:57023**
On the vanishing of the dual Stiefel-Whitney classes of orientable manifolds. **80g:57033**
Polombo, Albert Nombres caractéristiques d'une variété riemannienne de dimension 4. **80h:57032**
Shulman, Herbert Covering dimension and characteristic classes for foliations. **80e:57025**
Stone, David A. Notes on "A combinatorial formula for $P_1(X)$". **80g:57034**
Verdier, Jean-Louis *See* **Marry, Pierre, 80e:57012**

Secondary classifications:

Barros, M. *See* **Gray, Alfred; et al., (80m:32010)**
Blanton, John D. (*with* McCrory, Clint) An axiomatic proof of Stiefel's conjecture. **(80k:55052)**
Bott, Raoul On some formulas for the characteristic classes of group-actions. **(80a:57011)**
Brown, E. H., Jr. (*with* Peterson, F. P.) A universal space for normal bundles of n-manifolds. **(80k:57055)**
Carmeli, Moshe (*with* Wohl, D. H.) Chern classes, Pontrjagin forms and classification of gauge fields. **(80f:81105)**
Chen, Bang-yen Cobordism, A-genus and Einstein-Kähler metrics. **(80c:53056)**
Chern, Shiing Shen ★Complex manifolds without potential theory. **(80f:32001)**
Connolly, Francis X. Group actions, vector fields, and characteristic numbers. **(80g:57055)**
Donnelly, Harold Eta invariants for G-spaces. **(80m:58042)**
Gonzalez-Sprinberg, Gerardo Calcul de l'invariant local d'Euler pour les singularités quotient de surfaces. (English summary) **(80h:14015)**
Gray, Alfred (*with* Barros, M.; Martínez Naveira, Antonio; Vanhecke, Lieven) The Chern numbers of holomorphic vector bundles and formally holomorphic connections of complex vector bundles over almost complex manifolds. **(80m:32010)**
Hawking, S. W. Spacetime foam. **(80b:83026)**
Ishihara, Koichiro A new characteristic number for almost free T^2-actions. **(80g:57065)**
Kapitanskiĭ, L. V. *See* **Vakulenko, A. F., (80i:81045)**
Kulkarni, Ravindra S. P. A. Smith-theoretic algebro-geometric invariants of compact differentiable manifolds. **(80d:57012)**
Lewis, D. W. Frobenius algebras and Hermitian forms. **(80h:10029)**
Mamaev, S. G. (*with* Trunov, N. N.) Vacuum averages of the quantum field energy momentum tensor on manifolds of varying topology and geometry. I. (Russian) **(80m:81065a)**
(*with* Trunov, N. N.) Vacuum averages of the quantum field energy-momentum tensor on manifolds of varying topology and geometry. II. (Russian) **(80m:81065b)**
Marino, E. C. (*with* Swieca, J. A.) Non-integer topological number and infiniteness of action. **(80b:81075)**
Martínez Naveira, Antonio *See* **Gray, Alfred; et al., (80m:32010)**
Matsumoto, Yukio Secondary intersectional properties of 4-manifolds and Whitney's trick. **(80e:57017)**
McCrory, Clint *See* **Blanton, John D., (80k:55052)**
Moore, John Douglas (*with* White, James H.) Normal characteristic forms: conformal invariance and duality. **(80b:58006)**
Natsume, Toshikazu Certain Weil algebras of infinite-dimensional Lie algebras. **(80a:58040)**
van Nieuwenhuizen, P. *See* **Townsend, P. K., (80f:83040)**
Ochanine, Serge Formules "à la Hirzebruch" pour les invariants de Kervaire généralisés. (English summary) **(80k:55055)**
Oproiu, Vasile The d''-Chern classes of the complex vector bundles. **(80f:53041)**
Peterson, F. P. *See* **Brown, E. H., Jr., (80k:57055)**
Ryder, L. H. Dirac monopoles and the Hopf map $S^3 \to S^2$. **(80m:81117)**

Schaposnik, F. A. (*with* Solomin, J. E.) Gauge field singularities and noninteger topological charge. **(80h:81059)**
Schattner, Ruprecht The center of mass in general relativity. **(80j:83023)**
Solomin, J. E. *See* **Schaposnik, F. A., (80h:81059)**
Swieca, J. A. *See* **Marino, E. C., (80b:81075)**
Tong Van Duc Connexions induites et classes caractéristiques. **(80m:57023)**
Townsend, P. K. (*with* van Nieuwenhuizen, P.) Anomalies, topological invariants, and the Gauss-Bonnet theorem in supergravity. **(80f:83040)**
Trunov, N. N. *See* **Mamaev, S. G., (80m:81065a)** *and* **Mamaev, S. G., (80m:81065b)**
Vakulenko, A. F. (*with* Kapitanskiĭ, L. V.) Stability of solitons in S^2 of a nonlinear σ-model. (Russian) **(80i:81045)**
Vanbeckc, Lieven *See* **Gray, Alfred; et al., (80m:32010)**
White, James H. *See* **Moore, John Douglas, (80b:58006)**
Wohl, D. H. *See* **Carmeli, Moshe, (80f:81105)**

57R22 Topology of vector bundles and fiber bundles [See also 55Rxx.]

Neagu, Alexandru C. A geometric interpretation for the prolongation of a G-space. **80g:57035**
Neumann, Walter D. Multiplicativity of signature. **80b:57019**

Secondary classifications:

Goto, Midori S. Manifolds without focal points. **(80k:53074)**

57R25 Vector fields, frame fields, etc.

Amemiya, Ichiro Lie algebras of vector fields and structure of manifolds. (Japanese) **80b:57020**
Dediu, Mihai Tangent vector fields on lens spaces of dimension three. (Italian. French summary) **80a:57001**
Eisenberg, Murray (*with* Guy, Robert) A proof of the hairy ball theorem. **80i:57018**
Grabowski, Janusz Isomorphisms and ideals of the Lie algebras of vector fields. **80g:57036**
Guy, Robert *See* **Eisenberg, Murray, 80i:57018**
Ivanov, N. V. Pontrjagin manifolds. (Russian) **80e:57026**
Koriyama, Akira (*with* Maeda, Yoshiaki; Omori, Hideki) On Lie algebras of vector fields on expansive sets. **80i:57019**
Koschorke, Ulrich Bordism of plane fields and of foliations. **80h:57033**
Liang, Chao Chu Vector fields orthogonal to a nonvanishing infinitesimal isometry. **80m:57018**
Maeda, Yoshiaki *See* **Koriyama, Akira; et al., 80i:57019**
Ng, Tze Beng The existence of 7-fields and 8-fields on manifolds. **80b:57034**
Omori, Hideki *See* **Koriyama, Akira; et al., 80i:57019**

Secondary classifications:

Bacciotti, Andrea Structure métrique des orbites de familles symétriques de champs de vecteurs et théorie du temps minimum. **(80d:49014)**
Camacho, Maria Izabel Tavares Generic properties of homogeneous vector fields of degree two in $\mathbf{R}^3$. **(80k:58060)**
Codău, Nicolae (*with* Teodorescu, Ion D.) Sur les courbes caractéristiques d'une variété différentiable relatives à une algèbre de déformation. **(80k:53032)**
Dumortier, Freddy Finite determinacy of singularities of vectorfields. **(80f:58031)**
Eguchi, Tohru (*with* Hanson, Andrew J.) Self-dual solutions to Euclidean gravity. **(80h:83011)**
Friedrich, Th. (*with* Nestke, A.) Über SL-Mannigfaltigkeiten. **(80d:57017)**
Fuks, D. B. Cohomology of infinite-dimensional Lie algebras and characteristic classes of foliations. (Russian) **(80g:57039)**
Garaev, K. G. Methods of group theory of Lie transformations in the problem of reducing optimal processes. (Russian) **(80e:93022)**
García, Pedro L. (*with* Pérez-Rendón, Antonio) Reducibility of the symplectic structure of minimal interactions. **(80f:58022)**
González-Gascón, F. Reduction of vector fields to Newton-like vector fields. **(80g:58044)**
Gutiérrez, Carlos Structural stability for flows on the torus with a cross-cap. **(80k:58065)**
Hanson, Andrew J. *See* **Eguchi, Tohru, (80h:83011)**
Helffer, Bernard (*with* Nourrigat, Jean François) Hypoellipticité maximale pour des opérateurs polynômes de champs de vecteurs. (English summary) **(80k:35018)**
Hermann, Robert ★Cartanian geometry, nonlinear waves, and control theory. Part A. **(80e:49028)**
Hirschorn, R. M. Invertibility of nonlinear control systems. **(80c:49020)**
Hounie, Jorge G. Globally hypoelliptic and globally solvable first-order evolution equations. **(80h:35035)**
Isham, Christopher J. Spinor fields in four-dimensional space-time. **(80b:81122)**
Kasue, Yukihiro Cohomologies of Lie algebras of vector fields with coefficients in adjoint representations foliated case. **(80b:58071)**
Melin, A. Free systems of vector fields. **(80d:58064)**
Milnor, John Analytic proofs of the "hairy ball theorem" and the Brouwer fixed-point theorem. **(80m:55001)**
Nestke, A. *See* **Friedrich, Th., (80d:57017)**
van Nieuwenhuizen, P. *See* **Townsend, P. K., (80f:83040)**
Nourrigat, Jean François *See* **Helffer, Bernard, (80k:35018)**
Parker, George Divergence free vector fields and Bochner's theorems. (Russian summary) **(80f:53044)**
Pérez-Rendón, Antonio *See* **García, Pedro L., (80f:58022)**
Piscllo, Daniel M. Unified field theory with homotopic charge. **(80c:83049)**
da Rocha, Luiz Fernando Characterization of Morse-Smale isotopy classes on two-manifolds. **(80h:58035)**
Schäcker, Thomas Premier groupe de cohomologie, à coefficients dans la représentation adjointe, pour des algèbres de Lie attachées à une paire de variétés. (English summary) **(80b:58037)**
Sussmann, Héctor J. Subanalytic sets and feedback control. **(80k:34085)**
Takens, Floris Singularities of vectorfields and bifurcations. **(80e:58033)**
Teodorescu, Ion D. *See* **Codău, Nicolae, (80k:53032)**
Townsend, P. K. (*with* van Nieuwenhuizen, P.) Anomalies, topological invariants, and the Gauss-Bonnet theorem in supergravity. **(80f:83040)**

57R27 Controllability of vector fields on C^∞ and real-analytic manifolds [See also 49E15, 49F15.]

Frolov, E. B. *See* **Pupkov, K. A., 80g:57037**
Pupkov, K. A. (*with* Frolov, E. B.) An attainability property for nonlinear systems on manifolds. I. (Russian) **80g:57037**

Secondary classifications:

Kunita, Hiroshi Supports of diffusion processes and controllability problems. **(80i:60108)**
Rettiev, N. S. Some properties of minimal invariant sets of control systems. (Russian) **(80b:49033)**

57R30 Foliations; geometric theory

Adachi, Masahisa Construction of complex structures on open manifolds. **80k:57049**
Bott, Raoul On some formulas for the characteristic classes of group-actions. **80a:57011**
Bouma, L. G. (*with* van Est, W. T.) Manifold schemes and foliations on the 2-torus and the Klein bottle. I, II, III. **80j:57024**
Cantwell, John (*with* Conlon, Lawrence) Growth of leaves. **80b:57021**
Conlon, Lawrence *See* **Cantwell, John, 80b:57021**
Desolneux-Moulis, Nicole Sur certaines familles à un paramètre de feuilletages de $T^2 \times S^2$. (English summary) **80c:57013**
Epstein, D. B. A. (*with* Vogt, E.) A counterexample to the periodic orbit conjecture in codimension 3. **80c:57014**
van Est, W. T. *See* **Bouma, L. G., 80j:57024**
Fedida, Edmond Sur la théorie des feuilletages associée au repère mobile: cas des feuilletages de Lie. **80a:57012**
Hector, Gilbert Croissance des feuilletages presque sans holonomie. **80c:57015**
Germes de feuilletages. **80e:57027**
Heitsch, James L. Independent variation of secondary classes. **80b:57022**
Holmann, Harald On the stability of holomorphic foliations with all leaves compact. **80b:57023**
Imanishi, Hideki On codimension one foliations defined by closed one-forms with singularities. **80k:57050**
Jekel, Solomon M. A note on the perfection of the fundamental group of the classifying space for codimension one real analytic foliations. **80j:57025**
Kamber, Franz W. (*with* Tondeur, Philippe) G-foliations and their characteristic classes. **80b:57024**
(*with* Tondeur, Philippe) On the linear independence of certain cohomology classes of $B\Gamma_q$. **80e:57028**
Kitahara, Haruo (*with* Yorozu, S.) On the Čech bicomplex associated with foliated structures. (French summary) **80c:57016a**
(*with* Yorozu, S.) Errata: "On the Čech bicomplex associated with foliated structures" (Ann. Inst. Fourier (Grenoble) **28** (1978), no. 3, 217–224). **80c:57016b**
Langevin, Rémi (*with* Rosenberg, Harold) Integrable perturbations of fibrations and a theorem of Seifert. **80d:57013**
Feuilletages tendus. (English summary) **80m:57019**
Lazarov, Connor (*with* Shulman, Herbert) Obstructions to foliation preserving Lie group actions. **80m:57020**
Lehmann, Daniel Sur la généralisation d'un théorème de Tischler à certains feuilletages nilpotents. **80f:57013**
Levitt, Gilbert Feuilletages des variétés de dimension 3 qui sont des fibres en cercles. **80c:57017**
Meyer, Josiah e-foliations of codimension two. **80c:57018**
Mišačev, N. M. The construction of flags of foliations. (Russian) **80b:57035**
Molino, Pierre Feuilletages riemanniens sur les variétés compactes; champs de Killing transverses. (English summary) **80j:57026**
Nishimori, Toshiyuki Ends of leaves of codimension-one foliations. **80d:57014**
Plante, J. F. Foliations of 3-manifolds with solvable fundamental group. **80i:57020**
Pradines, Jean Feuillages dont les groupes d'holonomie sont de Coxeter. (English summary) **80b:57025**
Un feuilletage sans holonomie transversale, dont le quotient n'est pas une Q-variété. (English summary) **80e:57029**
Reeb, G. Structures feuilletées. **80b:57026**
Reinhart, Bruce L. The second fundamental form of a plane field. **80a:57013**
Rosenberg, Harold *See* **Langevin, Rémi, 80d:57013**
Roussarie, Robert Constructions de feuilletages (d'après W. Thurston). **80k:57051**
Rummler, Hansklaus Quelques notions simples en géométrie riemannienne et leurs applications aux feuilletages compacts. **80m:57021**
Sarkaria, K. S. A finiteness theorem for foliated manifolds. **80a:57014**
Schweitzer, Paul A. (*with* Whitman, Andrew P.) Pontryagin polynomial residues of isolated foliation singularities. **80a:57015**
Segal, Graeme Classifying spaces related to foliations. **80h:57036**
Shulman, Herbert *See* **Lazarov, Connor, 80m:57020**
Solodov, V. V. A geometric proof of a theorem of Mather. (Russian) **80h:57037**
Sullivan, Dennis A foliation of geodesics is characterized by having no "tangent homologies". **80c:57019**
A homological characterization of foliations consisting of minimal surfaces. **80m:57022**
Suzuki, Masakazu Sur les intégrales premières de certains feuilletages analytiques complexes. **80h:57038**
Tondeur, Philippe *See* **Kamber, Franz W., 80b:57024** *and* **Kamber, Franz W., 80e:57028**

Toeg Van Duc Connexions induites et classes caractéristiques. (Italian summary) **80k:57052**
Connexions induites et classes caractéristiques. **80m:57023**
Fibres vectoriels feuilletés. **80k:57027**
Tricerri, Franco On the differential geometry of multifoliated manifolds. (Italian. English summary) **80e:57030**
Vaisman, Izu Conformal foliations. **80g:57038**
Vogt, E. *See* **Epstein, D. B. A., 80c:57014**
Whitman, Andrew P. *See* **Schweitzer, Paul A., 80a:57015**
Yorozu, S. *See* **Kitahara, Haruo, 80c:57016a** *and* **Kitahara, Haruo, 80c:57016b**

Secondary classifications:

Abe, Kiaetsu On a class of Hermitian manifolds. **(80f:53027)**
Banyaga, Augustin On the structure of the automorphism group of a toral action. **(80f:58018)**
Camacho, César Foliations with singularities and group actions. (Portuguese) **(80e:58003)**
Christodoulou, Demetrios (*with* Francaviglia, Mauro) Some dynamical properties of Einstein space-times admitting a Gaussian foliation. **(80f:83034)**
Francaviglia, Mauro *See* **Christodoulou, Demetrios, (80f:83034)**
Françoise, Jean-Pierre Modèle local simultané d'une fonction et d'une forme de volume. (English summary) **(80k:32013)**
Gérard, Raymond Solutions formelles et convergentes de certains systèmes de Pfaff analytiques avec singularités. **(80h:58005)**
Gibbons, G. W. (*with* Hawking, S. W.) Classification of gravitational instanton symmetries. **(80d:83025)**
Hawking, S. W. *See* **Gibbons, G. W., (80d:83025)**
Hubbard, John (*with* Masur, Howard) Quadratic differentials and foliations. **(80b:30047)**
Jouanolou, J. P. Feuilles compactes des feuilletages algébriques. **(80g:14022)**
Kamber, Franz W. (*with* Tondeur, Philippe) Semi-simplicial Weil algebras and characteristic classes. **(80e:57031)**
Koschorke, Ulrich Bordism of plane fields and of foliations. **(80h:57033)**
Ladis, N. N. The integral curve of a complex homogeneous equation. (Russian) **(80d:34009)**
Lichnerowicz, André Algèbres de Lie attachées à un feuilletage. (English summary) **(80i:58051)**
Masur, Howard *See* **Hubbard, John, (80b:30047)**
Mattei, Jean-François (*with* Moussu, Robert) Intégrales premières d'une forme de Pfaff analytique. (English summary) **(80h:58003)**
Moussu, Robert *See* **Mattei, Jean-François, (80h:58003)**
Ngô van Quê Formes singulières génériques. **(80k:58002)**
Palis, Jacob Rigidity of the centralizers of diffeomorphisms and structural stability of suspended foliations. **(80b:58040)**
Tondeur, Philippe *See* **Kamber, Franz W., (80e:57031)**
Wagneur, Edouard Formes de Pfaff à singularités non dégénérées. (English summary) **(80c:58003)**

57R32 Classifying spaces for foliations; Gel'fand-Fuks cohomology

Fuks, D. B. Cohomology of infinite-dimensional Lie algebras and characteristic classes of foliations. (Russian) **80g:57039**
Kamber, Franz W. (*with* Tondeur, Philippe) Characteristic classes and Koszul complexes. **80h:57039**
(*with* Tondeur, Philippe) Semi-simplicial Weil algebras and characteristic classes. **80e:57031**
Ohnato, Hiroshi Characteristic classes of $\mathbb{S}$-foliated vector bundles and Gel'fand-Fuks cohomology. **80m:57024**
Rasmussen, Ole Hjorth Exotic characteristic classes for holomorphic foliations. **80d:57015**
Shulman, Herbert (*with* Stasheff, James) de Rham theory for $B\Gamma$. **80d:57016**
Stasheff, James *See* **Shulman, Herbert, 80d:57016**
Thomas, C. B. A classifying space for the contact pseudogroup. **80i:57021**
Tondeur, Philippe *See* **Kamber, Franz W., 80e:57031** *and* **Kamber, Franz W., 80h:57039**

Secondary classifications:

Cohen, F. R. (*with* Taylor, Laurence R.) Computations of Gel'fand-Fuks cohomology, the cohomology of function spaces, and the cohomology of configuration spaces. **(80f:58050)**
Fuks, D. B. Cohomology of infinite-dimensional Lie algebras and characteristic classes of foliations. (Russian) **(80g:57039)**
Haefliger, André Whitehead products and differential forms. **(80a:55012)**
Taylor, Laurence R. *See* **Cohen, F. R., (80f:58050)**

57R35 Differentiable mappings

Dejter, Italo José SO(3)-deformations of quasi-equivalences to transversality. **80k:57053**
Koutroufiotis, Dimitri Univalent mappings of the plane into itself. **80e:57032**

57R40 Imbeddings

Abe, Kōjun On the equivariant isotopy classes of some equivariant imbeddings of spheres. **80g:57040**
Cohen, F. R. (*with* Handel, D.) k-regular embeddings of the plane. **80e:57033**
Friedrich, Th. (*with* Nestke, A.) Über SL-Mannigfaltigkeiten. **80d:57017**
Handel, D. *See* **Cohen, F. R., 80e:57033**
Kamga, Jean Wounfo *See* **Pradines, Jean, 80d:57018**
Lausenbach, François (*with* Zambrano, Oscar) Disjonction à paramètres dans une variété de dimension 3, $\mathbf{P}^2$-irréductible. (English summary) **80b:57028**
Mielke, M. V. Sectional representation of multitopological spaces relative to a family of smoothness categories. **80g:57041**
Nestke, A. *See* **Friedrich, Th., 80d:57017**
Nežinskiĭ, V. M. Suspended sequences in the theory of links. (Russian) **80k:57054**
Pradines, Jean (*with* Kamga, Jean Wounfo) La catégorie des QF-variétés. (English summary) **80d:57018**
Rees, Elmer On submanifolds of projective space. **80i:57022**
Sugawara, Tamio Nonimmersion and nonembedding theorems for complex Grassmann manifolds. **80j:57027**
Turaev, V. G. Intersections of loops in two-dimensional manifolds. (Russian) **80d:57019**
Wells, G. S. Immersions of semianalytic spaces. **80b:57029**
Zambrano, Oscar *See* **Lausenbach, François, 80b:57028**

Secondary classifications:

Bourgeois, Gérald (*with* Spring, David) Groupes d'homotopie de l'espace des plongements propres d'une n-variété ouverte dans une m-variété ouverte. (English summary) **(80b:58021)**
Freedman, Michael Hartley A fake $S^3 \times \mathbf{R}$. **(80j:57029)**
Kauffman, Louis H. Signature of branched fibrations. **(80f:57008)**
Papastavridis, Stavros Imbeddings, immersions and integrability of characteristic classes. **(80b:55013)**
Spring, David *See* **Bourgeois, Gérald, (80b:58021)**

57R42 Immersions

Brown, E. H., Jr. (*with* Peterson, F. P.) A universal space for normal bundles of n-manifolds. **80k:57055**
Davis, Donald M. (*with* Mahowald, Mark) Immersions of projective spaces. **80e:57034**
Mahowald, Mark *See* **Davis, Donald M., 80e:57034**
Marchow, E. (*with* Pulikowski, W.) Equivariant Whitney immersion theorem. **80k:57040**
Peterson, F. P. *See* **Brown, E. H., Jr., 80k:57055**
Pulikowski, W. *See* **Marchow, E., 80k:57040**
Sigrist, François (*with* Suter, Ueli) On immersions $CP^n \partial \to R^{4n-2\alpha(n)}$. **80g:57042**
Suter, Ueli *See* **Sigrist, François, 80g:57042**

Secondary classifications:

Meyer, Daniel Courbure sectionnelle et opérateur de courbure en codimension plus grande que 2. (English summary) **(80g:53032)**
Szücs, A. Analogue of the Thom space for mappings with singularity of type Σ^1. (Russian) **(80k:57064)**

57R45 Singularities of differentiable mappings

Church, P. T. (*with* Timourian, J. G.) Differentiable maps with small critical set or critical set image. **80b:57030**
(*with* Timourian, J. G.) Maps having 0-dimensional critical set image. **80k:57056**
Izumiya, Shyūichi Homotopy classification of equivariant regular sections. **80k:57041**
Timourian, J. G. *See* **Church, P. T., 80b:57030** *and* **Church, P. T., 80k:57056**

Secondary classifications:

Arkeryd, Leif Thom's theorem for Banach spaces. **(80k:58027)**
Azevedo, Paulo Roberto F. *See* **Volpe, Celso; et al., (80k:58026)**
Belickiĭ, G. R. Equivalence and normal forms of germs of smooth mappings. (Russian) **(80k:58017)**
Damon, James Topological properties of discrete algebra types. II. Real and complex algebras. **(80k:58020)**
Danilov, V. I. Newton polyhedra and vanishing cohomology. (Russian) **(80k:14001)**
Gibson, C. G. ★Singular points of smooth mappings. **(80j:58011)**
Gonzalez-Sprinberg, Gerardo Calcul de l'invariant local d'Euler pour les singularités quotient de surfaces. (English summary) **(80k:14015)**
Magnus, R. J. Universal unfoldings in Banach spaces: reduction and stability. **(80k:58023)**
Nikulin, V. V. Integer symmetric bilinear forms and some of their geometric applications. (Russian) **(80j:10031)**
Oka, Mutsuo On the bifurcation of the multiplicity and topology of the Newton boundary. **(80k:32018)**
da Silva, Euripides Alves *See* **Volpe, Celso; et al., (80k:58026)**
Sotomayor, J. Singularities of differentiable mappings. (Portuguese) **(80k:58024)**
Volpe, Celso (*with* da Silva, Euripides Alves; Azevedo, Paulo Roberto F.) Contact equivalence. (Portuguese. English summary) **(80k:58026)**
Wall, C. T. C. Affine cubic functions. I. The complex plane. **(80h:14011)**
Zarrow, Robert Orientation reversing square roots of involutions. **(80k:57003a)**
Orientation reversing maps of surfaces. **(80k:57003b)**

57R50 Diffeomorphisms

Dwyer, William G. (*with* Szczarba, Robert H.) Sur l'homotopie des groupes de difféomorphismes. (English summary) **80j:57028**
Farrell, F. T. (*with* Hsiang, Wu Chung) On the rational homotopy groups of the diffeomorphism groups of discs, spheres and aspherical manifolds. **80g:57043**
Hajduk, Bogusław On the homotopy type of diffeomorphism groups of homotopy spheres. (Russian summary) **80g:57044**
Harrison, Jenny Unsmoothable diffeomorphisms on higher dimensional manifolds. **80g:57045**
Hsiang, Wu Chung On $\pi_i \mathrm{Diff} M^n$. **80h:57042**
See also **Farrell, F. T., 80g:57043**
Lee, Youn W. Surgery on diffeomorphism. **80e:57035**

Szczarba, Robert H. *See* **Dwyer, William G., 80j:57028**
Wagoner, J. B. Diffeomorphisms, K_2, and analytic torsion. **80e:57036**
$\mathcal{K}_2$ and diffeomorphisms of two and three dimensional manifolds. **80h:57043**

Secondary classifications:

Banyaga, Augustin Sur la structure du groupe des difféomorphismes qui préservent une forme symplectique. **(80c:58005)**
Brooks, Robert (*with* Trauber, Philip) The van Est theorem for groups of diffeomorphisms. **(80b:58020)**
Burghelea, Dan Automorphisms of manifolds. **(80g:57001)**
Lukackiĭ, A. M. The system of generators of the group of diffeomorphisms of an n-dimensional torus. (Russian) **(80k:58030)**
Mas-Colell, Andreu Homeomorphisms of compact, convex sets and the Jacobian matrix. **(80k:55005)**
Matumoto, Takao On the minimal ordered Morse functions on compact simply-connected manifolds. **(80m:57028)**
Stolzfus, Neal W. Isometries of inner product spaces and their geometric applications. **(80k:57043)**
Trauber, Philip *See* **Brooks, Robert, (80b:58020)**

57R52 Isotopy

Hatcher, A. E. Concordance spaces, higher simple-homotopy theory, and applications. **80f:57014**

Secondary classifications:

Abe, Kōjun On the equivariant isotopy classes of some equivariant imbeddings of spheres. **(80g:57040)**

57R55 Differentiable structures

57R60 Homotopy spheres, Poincaré conjecture

Fukuhara, Shinji On the invariant for a certain type of involutions of homology 3-spheres and its application. **80g:57046**
Neumann, Walter D. (*with* Weintraub, Steven H.) Four-manifolds constructed via plumbing. **80g:57047**
Weintraub, Steven H. *See* **Neumann, Walter D., 80g:57047**

Secondary classifications:

Hajduk, Bogusław On the homotopy type of diffeomorphism groups of homotopy spheres. (Russian summary) **(80g:57044)**
Stern, Ronald J. PL homology 3-spheres and triangulations of manifolds. **(80k:57038)**
Wood, John W. Complete intersections as branched covers and the Kervaire invariant. **(80h:14025)**

57R65 Surgery and handlebodies

Clauwens, F. J.-B. J. Surgery on products. I, II. **80k:57057**
Dovermann, Karl Heinz The equivariant surgery problem for involutions. **80k:57058**
Freedman, Michael Hartley A fake $S^3\times\mathbf{R}$. **80j:57029**
Harer, John On handlebody structures for hypersurfaces in $\mathbf{C}^3$ and $\mathbf{C}P^3$. **80d:57020**
Iwasa, Junkyo (*with* Miyoshi, Ken-ichi) On the decomposition theorem for $(n-2)$-connected $2n$-dimensional π-manifolds. **80j:57030**
Jones, John D. S. (*with* Rees, Elmer) Kervaire's invariant for framed manifolds. **80g:57048**
Jones, Lowell Construction of surgery problems. **80i:57023**
Milgram, R. James A survey of the classifying spaces associated to spherical fiberings and surgery. **80e:57037**
Miyoshi, Ken-ichi *See* **Iwasa, Junkyo, 80j:57030**
Petrie, Ted G surgery. I. A survey. **80g:57049**
Rees, Elmer *See* **Jones, John D. S., 80g:57048**
Williams, Bruce Applications of unstable normal invariants. I. **80h:57044**
Wood, John W. A connected sum decomposition for complete intersections. **80g:57050**

Secondary classifications:

Akbulut, Selman (*with* Kirby, Robion C.) Mazur manifolds. **(80h:57004)**
Bak, Anthony Arf's theorem for trace Noetherian and other rings. **(80j:10030)**
Brakman, A. L. Finiteness conditions for open manifolds and infinite complexes. (Russian) **(80b:55005)**
Carlsson, G. (*with* Milgram, R. James) Torsion Witt rings for orders and finite groups. **(80b:18012)**
César de Sá, Eugénia A link calculus for 4-manifolds. **(80k:57039)**
Farrell, F. T. (*with* Hsiang, Wu Chung) On the rational homotopy groups of the diffeomorphism groups of discs, spheres and aspherical manifolds. **(80g:57043)**
Hsiang, Wu Chung *See* **Farrell, F. T., (80g:57043)**
Kirby, Robion C. *See* **Akbulut, Selman, (80h:57004)**
Levitt, Norman The PL Grassmannian and PL curvature. **(80k:57045)**
Matumoto, Takao On the minimal ordered Morse functions on compact simply-connected manifolds. **(80m:57028)**
Milgram, R. James *See* **Carlsson, G., (80b:18012)**
Miščenko, A. S. (*with* Solov'ev, Ju. P.) A classifying space for Hermitian K-theory. (Russian) **(80g:57051)**
Neumann, Walter D. (*with* Weintraub, Steven H.) Four-manifolds constructed via plumbing. **(80g:57047)**
Papastavridis, Stavros On killing characteristic classes by cobordism. **(80j:57023)**
Pedersen, Erik Kjær Smoothings of H-spaces. **(80e:55017)**
Smoothing H-spaces. **(80d:55012)**
Solov'ev, Ju. P. *See* **Miščenko, A. S., (80g:57051)**
Stein, Elliott Free actions on products of spheres. **(80j:57042)**
Weintraub, Steven H. *See* **Neumann, Walter D., (80g:57047)**

57R67 Surgery obstructions, Wall groups [See also 18F25.]

Alexander, John P. (*with* Conner, P. E.; Hamrick, Gary C.) Metabolic and hyperbolic forms. **80e:57038**
Anderson, Gerald A. Groups of PL Λ-homology spheres. **80j:57031**
Carlsson, G. (*with* Milgram, R. James) The structure of odd L-groups. **80m:57025**
Conner, P. E. *See* **Alexander, John P.; et al., 80e:57038**
Farrell, F. T. The exponent of UNil. **80j:57032**
Hambleton, Ian (*with* Milgram, R. James) The surgery group $L^n_3(\mathbf{Z}(G))$ for G a finite 2-group. **80m:57026**
Hamrick, Gary C. *See* **Alexander, John P.; et al., 80e:57038**
Kac, G. A. Obstructions to equivariant surgery. (Russian) **80m:57027**
Milgram, R. James *See* **Carlsson, G., 80m:57025** *and* **Hambleton, Ian, 80m:57026**
Miščenko, A. S. (*with* Solov'ev, Ju. P.) A classifying space for Hermitian K-theory. (Russian) **80g:57051**
Petrie, Ted Pseudoequivalences of G-manifolds. **80e:57039**
Solov'ev, Ju. P. *See* **Miščenko, A. S., 80g:57051**

Secondary classifications:

Bak, Anthony The computation of even dimension surgery groups of odd torsion groups. **(80b:18010)**
Cappell, Sylvain E. (*with* Shaneson, Julius L.) Linear algebra and topology. **(80f:57016)**
Edmonds, Allan L. Fibering topological manifolds. **(80e:57023)**
Hegenbarth, Friedrich An application of the ρ-invariant. **(80g:57029)**
Ivanov, O. A. A construction for integral symmetric bilinear forms. (Russian. English summary) **(80i:10027)**
Lewis, D. W. Frobenius algebras and Hermitian forms. **(80h:10029)**
Petrie, Ted G surgery. I. A survey. **(80g:57049)**
Shaneson, Julius L. *See* **Cappell, Sylvain E., (80f:57016)**
Williams, Bruce Applications of unstable normal invariants. I. **(80h:57044)**

57R70 Critical points and critical submanifolds

Colin de Verdière, Yves (*with* Vey, Jacques) Le lemme de Morse isochore. **80k:57059**
Matumoto, Takao On the minimal ordered Morse functions on compact simply-connected manifolds. **80m:57028**
Rassias, George M. On the Morse-Smale characteristic of a differentiable manifold. **80m:57029**
Vey, Jacques *See* **Colin de Verdière, Yves, 80k:57059**

Secondary classifications:

Asanov, N. G. The triangulability of an equidistant curve of a boundary and the sets of the cut loci of the boundary for an analytical Riemannian manifold. (Russian. English summary) **(80b:53030)**
Carter, Sheila (*with* West, Alan) Totally focal embeddings. **(80i:53024)**
Gluck, Herman (*with* Singer, David A.) Scattering of geodesic fields. I. **(80c:53046)**
Singer, David A. *See* **Gluck, Herman, (80c:53046)**
West, Alan *See* **Carter, Sheila, (80i:53024)**
Wintgen, Peter On the total absolute curvature of knotted spheres. (Russian summary) **(80a:53006)**

57R75 O- and SO-cobordism

Dold, Albrecht Geometric cobordism and the fixed point transfer. **80g:57052**
Golubjatnikov, V. P. A theory of cobordisms. (Russian) **80m:57030**
Snaith, Victor P. Algebraic cobordism and K-theory. **80k:57060**

57R77 Complex cobordism (U- and SU-cobordism) [See also 55N22.]

Kiihl, José Carlos de Souza Weakly complex involutions. **80e:57040**

Secondary classifications:

Smith, Larry On ideals in Ω^U_*. II. **(80j:55005)**
Snaith, Victor P. Algebraic cobordism and K-theory. **(80k:57060)**

57R80 h- and s-cobordism

Hausmann, Jean-Claude (*with* Vogel, Pierre) Reduction of structures on manifolds by semi-s-cobordism. **80h:57031**
Lawson, Terry Trivializing 5-dimensional h-cobordisms by stabilization. **80i:57034**
Vogel, Pierre *See* **Hausmann, Jean-Claude, 80h:57031**

Secondary classifications:

Anderson, Douglas R. A triangulable space which possesses no natural piecewise linear structure. **(80a:57007)**
Cappell, Sylvain E. (*with* Shaneson, Julius L.) Linear algebra and topology. **(80f:57016)**
Shaneson, Julius L. *See* **Cappell, Sylvain E., (80f:57016)**

57R85 Equivariant cobordism

Alexander, John P. (*with* Hamrick, Gary C.) Periodic maps on Poincaré duality spaces. **80a:57016**
Beem, R. Paul The structure of Z_4 bordism. **80b:57032**

Bix, Michael C. A multiplicative transfer. **80j:57033**
Capobianco, Frank L. Fixed sets of involutions. **80a:57017**
Chiang, Chia Ch'i The extension of cyclic action to S^1-actions on unitary manifolds. **80c:57020**
Bordism of regular torus actions. **80k:57061**
Gibbs, David E. Witt classes of integral representations of an abelian 2-group. **80k:57062**
Hamrick, Gary C. *See* **Alexander, John P., 80a:57016**
Hara, Tamio On oriented G-manifolds of Baas-Sullivan type. **80f:57025**
Ishihara, Koichiro A new characteristic number for almost free T^2-actions. **80g:57053**
Kosniowski, Czes Some equivariant bordism theories vanish. **80e:57041**
Rowlett, Russell J. The fixed-point construction in equivariant bordism. **80e:57042**
Erratum to: "Torsion in the bordism of oriented involutions" (Trans. Amer. Math. 231 (1977), no. 2, 541–548). **80c:57021**
Stong, R. E. Semi-free group actions. **80g:57054**

Secondary classifications:

Alexander, John P. (*with* Conner, P. E.; Hamrick, Gary C.) Metabolic and hyperbolic forms. **(80e:57038)**
Capobianco, Frank L. (*with* Kosniowski, Czes; Stong, R. E.) Free involutions. **(80j:57037)**
Conner, P. E. *See* **Alexander, John P.; et al., (80e:57038)**
tom Dieck, Tammo Homotopy equivalent group representations and Picard groups of the Burnside ring and the character ring. **(80b:20005)**
Ewing, John Semifree actions on finite groups on homotopy spheres. **(80a:57020)**
Hamrick, Gary C. *See* **Alexander, John P.; et al., (80e:57038)**
Hara, Tamio On S_n-manifolds with circle actions. **(80e:57050)**
Kosniowski, Czes ★Actions of finite abelian groups. **(80e:57047)**
See also **Capobianco, Frank L.; et al., (80j:57037)**
Schultz, Reinhard Spherelike G-manifolds with exotic equivariant tangent bundles. **(80k:57046)**
Stong, R. E. *See* **Capobianco, Frank L.; et al., (80j:57037)**

57R90 Other types of cobordism [See 55N22.]

Imaoka, Mitsunori (*with* Morisugi, Kaoru) A note on characteristic numbers of MSp_*. **80c:57022**
Kikuchi, Shigeki Cobordism classes of n-manifolds which immerse in $\mathbf{R}^{n+2}$. II. **80e:57043**
Melvin, Paul Bordism of diffeomorphisms. **80m:57031**
Morava, Jack Completions of complex cobordism. **80i:57026**
A product for the odd-primary bordism of manifolds with singularities. **80k:57063**
Morisugi, Kaoru *See* **Imaoka, Mitsunori, 80c:57022**
Rees, Elmer (*with* Thomas, Emery) Complex cobordism and intersections of projective varieties. **80c:57044**
Szücs, A. Analogue of the Thom space for mappings with singularity of type Σ^1. (Russian) **80k:57064**
Thomas, Emery *See* **Rees, Elmer, 80e:57044**
Vogt, Renate Cobordismus von Knoten. **80k:57065**

Secondary classifications:

Becker, J. C. (*with* Schultz, Reinhard) Fixed-point indices and left invariant framings. **(80e:57045)**
Buhštaber, V. M. Characteristic classes in cobordism and topological applications of the theory of single-valued and two-valued formal groups. (Russian) **(80g:55008)**
(*with* Šokurov, A. V.) The Landweber-Novikov algebra and formal vector fields on the line. (Russian) **(80k:55017)**
Hambleton, Ian (*with* Milgram, R. James) Poincaré transversality for double covers. **(80j:57017)**
Hausmann, Jean-Claude (*with* Vogel, Pierre) The plus construction and lifting maps from manifolds. **(80e:57016)**
Milgram, R. James *See* **Hambleton, Ian, (80j:57017)**
Mironov, O. K. Multiplications in cobordism theories with singularities and the Steenrod-tom Dieck operations. (Russian) **(80d:55005)**
Rees, Elmer (*with* Thomas, Emery) Smoothings of isolated singularities. **(80e:57021)**
Schultz, Reinhard *See* **Becker, J. C., (80e:57045)**
Šokurov, A. V. *See* **Buhštaber, V. M., (80k:55017)**
Thomas, Emery *See* **Rees, Elmer, (80e:57021)**
Vogel, Pierre *See* **Hausmann, Jean-Claude, (80e:57016)**

57R95 Realizing cycles by submanifolds

Cohen, F. R. Braid orientations and bundles with flat connections. **80b:57033**
Freedman, Michael Hartley (*with* Kirby, Robion C.) A geometric proof of Rochlin's theorem. **80f:57015**
A converse to (Milnor-Kervaire theorem) $\times R$ etc. **80k:57066**
Kirby, Robion C. *See* **Freedman, Michael Hartley, 80f:57015**
Meeks, William H., III Representing codimension-one homology classes on closed nonorientable manifolds by submanifolds. **80k:57067**

Secondary classifications:

Chen, Kuo Tsai Iterated integration and loopspace cohomology. **(80d:58003)**

57R99 None of the above, but in this section

Cooke, George E. Constructing spaces with interesting $\mathbf{Z}/p$-cohomology via ϵ-actions on loop spaces. **80m:57032**
Mandelbaum, Richard On the topology of elliptic surfaces. **80j:57034**

Secondary classifications:

Neisendorfer, Joseph (*with* Taylor, Laurence R.) Dolbeault homotopy theory. **(80f:32004)**
Taylor, Laurence R. *See* **Neisendorfer, Joseph, (80f:32004)**

57Sxx Topological transformation groups [See also 20F34, 22–XX, 54H15, 58D05.]

57S05 Topological properties of groups of homeomorphisms

Cappell, Sylvain E. (*with* Shaneson, Julius L.) Linear algebra and topology. **80f:57016**
Haver, William E. The closure of the space of homeomorphisms on a manifold. The piecewise linear case. **80j:57035**
Semenov, V. I. On the representation of the superposition of certain classes of mappings. (Russian) **80j:57036**
Shaneson, Julius L. *See* **Cappell, Sylvain E., 80f:57016**

Secondary classifications:

César de Sá, Eugénia (*with* Rourke, Colin) The homotopy type of homeomorphisms of 3-manifolds. **(80j:57006)**
Ferry, Steve On a space of group actions. **(80h:57021)**
Haver, William E. A near-selection theorem. **(80c:54015)**
Ho, Chung Wu On the space of the linear homeomorphisms of a polyhedral N-cell with two interior vertices. **(80k:57004)**
Ivanov, N. V. Homotopies of automorphism spaces of some three-dimensional manifolds. (Russian) **(80k:57015)**
Mankiewicz, Piotr Fat equicontinuous groups of homeomorphisms of linear topological spaces and their application to the problem of isometries in linear metric spaces. **(80g:46004)**
Rourke, Colin *See* **César de Sá, Eugénia, (80j:57006)**

57S10 Compact groups of homeomorphisms

Allday, Christopher Rational homotopy and torus actions. **80m:57033**
Liulevicius, Arunas Linear actions on friendly spaces. **80m:57034**
Skjelbred, Tor Cohomology eigenvalues of equivariant mappings. **80m:57035**

Secondary classifications:

Berstein, Israel (*with* West, J. E.) Based free compact Lie group actions on Hilbert cubes. **(80k:57025)**
Fujino, Tsutomu (*with* Kamata, Masayoshi) J-groups of orbit manifolds $D_p(4m+3, 8n+7)$ of $S^{8m+7} \times S^{8n+7}$ by the dihedral group D_p. **(80d:55020)**
James, I. M. (*with* Segal, Graeme) On equivariant homotopy type. **(80k:55045)**
Kamata, Masayoshi *See* **Fujino, Tsutomu, (80d:55020)**
Ku, Hsü Tung (*with* Ku, Mei Chin) Group actions on A_k-manifolds. **(80d:57021)**
Ku, Mei Chin *See* **Ku, Hsü Tung, (80d:57021)**
Segal, Graeme *See* **James, I. M., (80k:55045)**
West, J. E. *See* **Berstein, Israel, (80k:57025)**

57S15 Compact Lie groups of differentiable transformations

Becker, J. C. (*with* Schultz, Reinhard) Fixed-point indices and left invariant framings. **80e:57045**
Connolly, Francis X. Group actions, vector fields, and characteristic numbers. **80g:57055**
Davis, Michael ★Multiaxial actions on manifolds. **80e:57046**
Smooth G-manifolds as collections of fiber bundles. **80b:57034**
tom Dieck, Tammo (*with* Petrie, Ted) Geometric modules over the Burnside ring. **80h:57045**
Field, M. J. Resolving actions of compact Lie groups. **80c:57023**
Iwata, Koichi Classification of compact transformation groups on cohomology quaternion projective spaces with codimension one orbits. **80k:57068**
Komiyama, Haruo Almost effective smooth actions on a compact Riemannian symmetric space with fixed points. **80c:57024**
Kosniowski, Czes ★Actions of finite abelian groups. **80e:57047**
Ku, Hsü Tung (*with* Ku, Mei Chin) Group actions on A_k-manifolds. **80d:57021**
Ku, Mei Chin *See* **Ku, Hsü Tung, 80d:57021**
Liang, Chao Chu Differentiable pseudo-free circle actions on homotopy spheres. **80a:57018**
Oliver, Robert Weight systems for SO(3)-actions. **80m:57036**
Petrie, Ted *See* **tom Dieck, Tammo, 80h:57045**
Schultz, Reinhard Spherelike G-manifolds with exotic equivariant tangent bundles. **80h:57046**
See also **Becker, J. C., 80e:57045**
Schwänzl, Roland On the spectrum of the Burnside ring. **80k:57069**
Skjelbred, Tor Combinatorial geometry and actions of compact Lie groups. **80m:57037**
Uchida, Fuichi (*with* Watabe, Tsuyoshi) A note on compact connected transformation groups on spheres with codimension two principal orbit. **80f:57017**
Watabe, Tsuyoshi *See* **Uchida, Fuichi, 80f:57017**

Secondary classifications:

Burdet, G. (*with* Martin, Christiane; Perrin, M.) About the conformal properties of Yang-Mills fields. **(80k:81082)**
Cappell, Sylvain E. (*with* Shaneson, Julius L.) Linear algebra and topology. **(80f:57016)**
Edmonds, Allan L. (*with* Fintushel, Ronald) Topological singular circle fiberings. **(80a:54072)**
Fintushel, Ronald *See* **Edmonds, Allan L., (80a:54072)**
Harnad, J. (*with* Shnider, S.; Vinet, Luc) The Yang-Mills system in compactified

Minkowski space; invariance conditions and SU(2) invariant solutions. **(80d:81073)**
Lashof, R. (*with* Rothenberg, Mel) *G*-smoothing theory. **(80h:57030)**
Lukesh, Gordon W. Variations of metrics on homogeneous manifolds. **(80j:53050)**
Martin, Christiane *See* **Burdet, G.; et al., (80k:81082)**
Neagu, Alexandru C. A geometric interpretation for the prolongation of a *G*-space. **(80g:57035)**
Perrin, M. *See* **Burdet, G.; et al., (80k:81082)**
Petrie, Ted Pseudoequivalences of *G*-manifolds. **(80e:57039)**
Rothenberg, Mel *See* **Lashof, R., (80h:57030)**
Shaneson, Julius L. *See* **Cappell, Sylvain E., (80f:57016)**
Shnider, S. *See* **Harnad, J.; et al., (80d:81073)**
Stong, R. E. Semi-free group actions. **(80g:57054)**
Vinet, Luc *See* **Harnad, J.; et al., (80d:81073)**

57S17 Finite transformation groups

Baglivo, Jenny A. An equivariant Wall obstruction theory. **80k:57070**
Capobianco, Frank L. (*with* Kosniowski, Czes; Stong, R. E.) Free involutions. **80j:57037**
Kosniowski, Czes *See* **Capobianco, Frank L.; et al., 80j:57037**
Negishi, Aiko (*with* Noguchi, Keiko) Fixed point free involutions on 4-dimensional torus. **80f:57018**
Noguchi, Keiko *See* **Negishi, Aiko, 80f:57018**
Robinson, Eric E. A characterization of certain branched coverings as group actions. **80g:57056**
Rothenberg, Mel Torsion invariants and finite transformation groups. **80j:57038**
Rubinstein, J. H. Free actions of some finite groups on S^3. I. **80k:57071**
Stong, R. E. *See* **Capobianco, Frank L.; et al., 80j:57037**
Wong, Raymond Y. Cyclic group actions on Q and Hurewicz fibration. **80k:57072**
Zimmermann, Bruno Periodische Homöomorphismen Seifertscher Faserräume. **80i:57027**

Secondary classifications:

Abe, Kōjun On the equivariant isotopy classes of some equivariant imbeddings of spheres. **(80g:57040)**
Dovermann, Karl Heinz The equivariant surgery problem for involutions. **(80k:57058)**
Fukuhara, Shinji On the invariant for a certain type of involutions of homology 3-spheres and its application. **(80g:57046)**
Hauschild, Henning Äquivariante Whiteheadtorsion. (English summary) **(80g:57023)**
Jackowski, Stefan The Euler class and periodicity of group cohomology. **(80a:55004)**
Jones, Lowell Two characteristic classes and Smith theory. **(80g:57030)**
Geometric construction for $Z_{(n)}$-homology manifolds. **(80k:57044)**
Kamishima, Yoshinobu Free group actions of $Z_{p,q} \times Z_h$ on homotopy spheres. **(80k:57074)**
Kosniowski, Czes Symmetries of surfaces. **(80h:57009)**
Matsuda, Toshimitsu On the equivariant self-homotopy equivalences of spheres. **(80k:55010)**
Nakaoka, Minoru Equivariant point theorems for involutions. **(80j:55001)**
Pawałowski, Krzysztof Fixed points of cyclic group actions on disks. (Russian summary) **(80j:57041)**
Petrie, Ted G surgery. I. A survey. **(80g:57049)**
Quinn, Frank Finite nilpotent group actions on finite complexes. **(80i:55012)**
Stein, Elliott Free actions on products of spheres. **(80j:57042)**
Stieglitz, Andreas Actions of groups with periodic cohomology on Poincaré duality spaces. **(80m:57013)**

57S20 Noncompact Lie groups of transformations

Abels, Herbert (*with* Lütkepohl, Helmut) Slices for proper actions of noncompact Lie groups. **80e:57048**
Goto, Morikuni Semi-algebraic groups and the local closure of an orbit in a homogeneous space. **80b:57035**
Hirsch, Morris W. Flat manifolds and the cohomology of groups. **80g:57057**
Stability of stationary points of group actions. **80k:57073**
Liang, Chao Chu Riemannian $\mathbf{R}^k$-actions on compact manifolds. **80f:57019**
Lütkepohl, Helmut *See* **Abels, Herbert, 80e:57048**

Secondary classifications:

Bautlini, N. S. Nonlinear de Sitter symmetry and restricted space-time regions in gravity and supergravity. **(80f:83054)**

57S25 Groups acting on specific manifolds

Abiko, Tadayuki Some properties of $SL(n)$ action on some Grassmann manifolds. **80a:57019**
Chang, Theodore Equivariant maps with nonzero Hopf invariant. **80h:57047**
Cohen, Joel M. Finite group actions on finite complexes. **80d:57022**
Davis, Michael (*with* Hsiang, Wu Chung; Hsiang, W. Y.) Differential actions of compact simple Lie groups on homotopy spheres and Euclidean spaces. **80e:57049**
Ewing, John Semifree actions on finite groups on homotopy spheres. **80a:57020**
Hara, Tamio On S_n-manifolds with circle actions. **80e:57050**
Hattori, Akio Spin^c-structures and S^1-actions. **80e:57051**
Hsiang, W. Y. *See* **Davis, Michael; et al., 80e:57049**
Hsiang, Wu Chung *See* **Davis, Michael; et al., 80e:57049**
Hudson, Kiki Classification of SO(3)-actions on five-manifolds with singular orbits. **80j:57039**
Iberkleid, Wolf Pseudolinear spheres. **80d:57023**
Kamishima, Yoshinobu Free group actions of $Z_{p,q} \times Z_h$ on homotopy spheres. **80k:57074**
Kim, Paik Kee Cyclic actions on lens spaces. **80m:57038**
Liang, Chao Chu Some exotic dihedral group actions on homotopy spheres. **80i:57028**
Nakanishi, Aiko Classification of SO(3)-actions on five manifolds. **80f:57020**
Oliver, Robert Group actions on disks, integral permutation representations, and the Burnside ring. **80j:57040**
Orlik, Peter Singularities and group actions. **80e:57052**
Pawałowski, Krzysztof Fixed points of cyclic group actions on disks. (Russian summary) **80j:57041**
Schultz, Reinhard Smooth actions of small groups on exotic spheres. **80e:57053**
Stein, Elliott Free actions on products of spheres. **80j:57042**
Thomas, C. B. Free actions by finite groups on S^3. **80k:57075**
Tsukada, Etsuo (*with* Washiyama, Ryo) S^1-actions on cohomology complex projective spaces with three components of the fixed point sets. **80j:57043**
Uchida, Fuichi Classification of compact transformation groups on cohomology complex projective spaces with codimension one orbits. **80b:57036**
Wall, C. T. C. Free actions of finite groups on spheres. **80k:57076**
Washiyama, Ryo *See* **Tsukada, Etsuo, 80j:57043**
Yoshida, Tomoyoshi On S^1 actions on cohomology complex projective spaces. (Japanese) **80k:57077**

Secondary classifications:

Beckers, J. (*with* Jaminon, M.; Serpe, J.) Invariant tensors for some maximal subgroups of the conformal group of space-time. **(80g:83024)**
Jaminon, M. *See* **Beckers, J.; et al., (80g:83024)**
Jones, Lowell Construction of surgery problems. **(80i:57023)**
Liang, Chao Chu Differentiable pseudo-free circle actions on homotopy spheres. **(80a:57018)**
Oliver, Robert Weight systems for SO(3)-actions. **(80m:57036)**
Pjaseckiĭ, V. S. Convex cones of T-finite type. (Russian) **(80f:32021)**
Reich, Daniel On certain polynomials of Gaussian type. **(80g:10049)**
Rothenberg, Mel Torsion invariants and finite transformation groups. **(80j:57038)**
Schultz, Reinhard Spherelike G-manifolds with exotic equivariant tangent bundles. **(80b:57046)**
Serpe, J. *See* **Beckers, J.; et al., (80g:83024)**
Zarrow, Robert On Earle's mod n relative Teichmüller spaces. **(80a:32019)**

57S30 Discontinuous groups of transformations

Johnson, Francis E. A. On groups which act freely on vector bundles over spheres. **80k:57078**
Kulkarni, Ravindra S. Infinite regular coverings and Kleinian groups. **80e:57054**
Some topological aspects of Kleinian groups. **80j:57044**

Secondary classifications:

Gusevskiĭ, N. A. On two classes of Kleinian groups. (Russian) **(80a:30053)**
Raymond, Frank (*with* Wigner, David) Constructions of aspherical manifolds. **(80d:57003)**
Thomas, C. B. On 3-manifolds with finite solvable fundamental group. **(80k:57020)**
Wigner, David *See* **Raymond, Frank, (80d:57003)**

57S99 None of the above, but in this section

Secondary classifications:

Alekseevskiĭ, D. V. Perfect actions of Lie groups. (Russian) **(80e:53050)**
Lazarov, Connor (*with* Shulman, Herbert) Obstructions to foliation preserving Lie group actions. **(80m:57020)**
Luna, D. Remarques sur un article de J. W. Robbin: "Lie algebras of infinitesimal norm isometries" (Linear Algebra and Appl. **10** (1975), 95–102). **(80a:22026)**
(Robbin, Joel W.) *See* **Luna, D., (80a:22026)**
Shulman, Herbert *See* **Lazarov, Connor, (80m:57020)**

57Txx Homology and homotopy of topological groups and related structures

57T05 Hopf algebras [See also 16A24.]

Secondary classifications:

Kozima, Kazumoto The Hopf algebra structure of $K_*(\Omega Sp(n))$. **(80k:55014)**

57T10 Homology and cohomology of Lie groups

Brown, Robert F. A homological characterization of inner automorphisms of compact Lie groups. **80a:57021**
Kono, Akira Hopf algebra structure and cohomology operations of the mod2 cohomology of the exceptional Lie groups. **80d:57024**
Stieglitz, Andreas Cohomology theory of Dynkin algebras and Lie groups. **80d:57025**

Secondary classifications:

Blanc, Philippe Sur la cohomologie continue des groupes localement compacts. **(80k:22009)**
Mackenzie, K. A. Rigid cohomology of topological groupoids. **(80i:22011)**
Roberts, John E. A survey of local cohomology. **(80b:81066)**
Watanabe, Takashi The homology of the loop space of the exceptional group F_4. **(80g:55014)**

57T15 Homology and cohomology of homogeneous spaces of Lie groups

Abeasis, Silvana (*with* Del Fra, Alberto) Characteristic classes through classical invariant theory. **80a:57022**
Del Fra, Alberto *See* **Abeasis, Silvana, 80a:57022**
Manturov, O. V. An integer equation that is connected with homogeneous Riemannian spaces. (Russian) **80f:57029**
Some cohomological properties of the Cartan models of symmetric spaces. **80b:57037**

Secondary classifications:

Feshbach, Mark The transfer and characteristic classes. **80f:57012)**
Furukawa, Yasukuni *See* **Nomura, Yasutoshi, (80d:55018)**
Kono, Akira (*with* Mimura, Mamoru) On the cohomology mod 2 of the classifying space of $Ad E_7$. **(80f:55017)**
Mimura, Mamoru *See* **Kono, Akira, (80f:55017)**
Nomura, Yasutoshi (*with* Furukawa, Yasukuni) Some homotopy groups of complex Stiefel manifolds $W_{n,2}$ and $W_{n,3}$. II. **(80d:55018)**
Watanabe, Takashi Cohomology operations in the loop space of the compact exceptional group F_4. **(80k:55028)**

57T20 Homotopy groups of topological groups and homogeneous spaces

Kachi, Hideyuki Homotopy groups of homogeneous space $SU(n)/SO(n)$. **80g:57058a**
Homotopy groups of homogeneous space $Sp(n)/U(n)$. **80g:57058b**
Homotopy groups of symmetric spaces Γ_n. **80g:57058c**
Nomura, Yasutoshi Some homotopy groups of real Stiefel manifolds in the metastable range. I. **80h:57048a**
Some homotopy groups of real Stiefel manifolds in the metastable range. II. **80h:57048b**
Ye, Fang Cao Conjugate points on Grassmann manifolds. (Chinese) **80e:57055**

Secondary classifications:

Love, A. (*with* Zakrzewski, S.) Topology of textures in the planar phase of superfluid ^{3}He. **(80g:81089)**
Oda, Nobuyuki Periodic families in the homotopy groups of SU(3), SU(4), Sp(2) and G_2. **(80f:55015)**
Takeuchi, Masaru On conjugate loci and cut loci of compact symmetric spaces. II. **(80k:53082)**
Zakrzewski, S. *See* **Love, A., (80g:81089)**

57T25 Homology and cohomology of H-spaces

Secondary classifications:

Lin, James P. On the topology of finite H-spaces. **(80j:55011)**

57T30 Bar and cobar constructions [See also 18G55, 55Uxx.]

Chen, Kuo Tsai Circular bar construction. **80j:57045**

57T35 Applications of Eilenberg-Moore spectral sequences [See also 55R20, 55T20.]

Secondary classifications:

Harper, John R. On the construction of mod p H-spaces. **(80g:55017)**

57T99 None of the above, but in this section

Secondary classifications:

Meyers, C. (*with* de Roo, M.) New explicit instantons and the geometry of the parameter space. **(80d:81115)**
de Roo, M. *See* **Meyers, C., (80d:81115)**

58-XX GLOBAL ANALYSIS, ANALYSIS ON MANIFOLDS [See also 32Cxx, 32Fxx, 46–XX, 47Hxx, 53Cxx; for geometric integration theory, see 49F20, 49F22.]

58–01 Elementary exposition, textbooks

Chencíner, A. Stabilité structurelle et ergodicité (ou catégorie et mesure). (English summary) **80j:58001**
Eisenack, Günther (*with* Fenske, Christian) ★Fixpunkttheorie. **80g:58001**
Fenske, Christian *See* **Eisenack, Günther, 80g:58001**
Gähler, Werner ★Grundstrukturen der Analysis. Band I. **80l:58001a**
★Grundstrukturen der Analysis. II. **80l:58001b**
Nöbeling, Georg ★Integralsätze der Analysis. **80l:58002**
Rowe, E. G. Peter Decomposition of vector fields by scalar potentials. **80c:58001**

Secondary classifications:

Arnol'd, V. I. ★Математические методы классической механики. (Russian) [Mathematical methods of classical mechanics] **(80h:70001)**
Dieudonné, Jean ★Grundzüge der modernen Analysis. Vol. 5/6. **(80f:43001)**
(Harrell, Evans M.) *See* **Thirring, Walter, (80d:70003)**
Jeggle, Hansgeorg ★Nichtlineare Funktionalanalysis. **(80k:47057)**
Konrakov, B. P. ★Структуры на многообразиях и однородные пространства. (Russian) [Structures on manifolds and homogeneous spaces] **(80h:53001)**
Lima, Elon Lages ★Variedades diferenciáveis. (Portuguese) [Differentiable manifolds] **(80l:57001)**
Thirring, Walter ★A course in mathematical physics. Vol. I. Classical dynamical systems. **(80d:70003)**
Thom, René Sur certains aspects qualitatifs de la théorie des équations aux dérivées partielles. **(80j:58068)**

58–02 Advanced exposition (research surveys, monographs, etc.)

Atiyah, Michael Francis Geometry and physics. (Japanese) **80d:58001**
Sussmann, Héctor J. (*with* Zahler, Raphael S.) Catastrophe theory as applied to the social and biological sciences: a critique. **80h:58001**
Zahler, Raphael S. *See* **Sussmann, Héctor J., 80h:58001**

58–03 Historical (must also be assigned at least one classification number from Section 01)

Secondary classifications:

Demidov, S. S. On the history of S. Lie's theory of partial differential equations. (Russian) **(80b:01010)**
(Lie, S.) *See* **Demidov, S. S., (80b:01010)**
Weil, André ★Oeuvres scientifiques. Collected papers. Vol. I (1926–1951). **(80k:01067a)**
Bibliography:
Weil, André *See* **Weil, André, (80k:01067a)**

58–04 Explicit machine computation and programs (not the theory of computation or programming)

58–06 Proceedings, conferences, etc.

(Byrnes, Christopher I.) *See* **Partial differential equations and geometry, 80d:58002**
Astérisque *See* **Journées Singulières, 80e:58001**
Beiträge:
Differentialgeometrie ★Beiträge zur Differentialgeometrie, Heft 1. **80b:58001**
Conference:
Partial Differential Equations and Geometry *See* **Partial differential equations and geometry, 80d:58002**
Differential geometry *See* **Beiträge: Differentialgeometrie, 80b:58001**
Dijon *See* **Journées Singulières, 80e:58001**
Geometry *See* **Partial differential equations and geometry, 80d:58002** *and* **Global analysis in geometry, 80f:58001**
Geometry and global analysis ★Geometry and global analysis. (Japanese) **80g:58002**
Global analysis *See* **Geometry and global analysis, 80g:58002**
Global analysis in geometry ★Global analysis in geometry. (Japanese) **80f:58001**
Journées Singulières ★Journées Singulières de Dijon. **80e:58001**
Kyoto *See* **Global analysis in geometry, 80f:58001** *and* **Geometry and global analysis, 80g:58002**
Park City, Utah *See* **Partial differential equations and geometry, 80d:58002**
Partial differential equations and geometry ★Partial differential equations and geometry. **80d:58002**
Singularities *See* **Journées Singulières, 80e:58001**
Symposium:
Geometry and Global Analysis *See* **Geometry and global analysis, 80g:58002**
Global Analysis in Geometry *See* **Global analysis in geometry, 80f:58001**

Secondary classifications:

(Bleuler, Konrad) *See* **Differential geometrical methods in matematical physics, (80b:81056)**
(Hörmander, Lars) *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, (80g:35003)**
(Kock, Anders) *See* **Topos theoretic methods in geometry, (80l:18002)**
(Petry, Herbert Rainer) *See* **Differential geometrical methods in matematical physics, (80b:81056)**
(Reetz, Axel) *See* **Differential geometrical methods in matematical physics, (80b:81056)**
Analyse non convexe ★Analyse non convexe. **(80m:49001)**
Analysis *See* **Analyse non convexe, (80m:49001)**
Bonn *See* **Differential geometrical methods in matematical physics, (80b:81056)**
Bull. Soc. Math. France Mem. *See* **Analyse non convexe, (80m:49001)**
Colloque:
Analyse non convexe *See* **Analyse non convexe, (80m:49001)**
Conference:
Differential Geometrical Methods in Mathematical Physics *See* **Differential geometrical methods in matematical physics, (80b:81056)**
Differential geometrical methods in matematical physics ★Differential geometrical methods in mathematical physics. II. **(80b:81056)**
Holonomic quantum fields *See* **Solitons and holonomic quantum fields, (80f:81003)**
Kyoto *See* **Solitons and holonomic quantum fields, (80f:81003)**
Linear differential equations *See* **Micro-local analysis of linear differential equations, (80l:35004)**
Linear partial differential equations *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, (80g:35003)**
Mathematical physics *See* **Differential geometrical methods in matematical physics, (80b:81056)**
Micro-local analysis *See* **Seminar: Micro-local Analysis, (80k:35005)**
Micro-local analysis of linear differential equations ★Micro-local analysis of linear differential equations. (Japanese) **(80l:35004)**
Nonconvex Analysis *See* **Analyse non convexe, (80m:49001)**

Pan *See* **Analyse non convexe, (80m:49001)**
Princeton, N.J. *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, (80g:35003)**
Seminar:
Micro-local Analysis ★Seminar on Micro-local Analysis. **(80k:35005)**
Singularities of Solutions of Linear Partial Differential Equations ★Seminar on Singularities of Solutions of Linear Partial Differential Equations. **(80g:35003)**
Singularities *See* **Seminar: Singularities of Solutions of Linear Partial Differential Equations, (80g:35003)**
Solitons and holonomic quantum fields ★Solitons and holonomic quantum fields. (Japanese) **(80f:81003)**
Symposium:
Micro-local Analysis of Linear Differential Equations *See* **Micro-local analysis of linear differential equations, (80i:35004)**
Solitons and Holonomic Quantum Fields *See* **Solitons and holonomic quantum fields, (80f:81003)**
Topos theoretic methods in geometry ★Topos-theoretic methods in geometry. **(80i:18002)**

58Axx General theory of differentiable manifolds

58A05 Differentiable manifolds, foundations

Batchelor, Marjorie The structure of supermanifolds. **80h:58002**
Bosch, Jorge (*with* Sagastume, Marta) Catégories de variétés abstraites. **80e:58002**
Sagastume, Marta *See* **Bosch, Jorge, 80e:58002**

Secondary classifications:

Chow, Yutze On algebras, manifolds, and fibre bundles in physics. **(80e:81030)**
Dell, John (*with* Smolin, Lee) Graded manifold theory as the geometry of supersymmetry. **(80e:83015)**
Dodson, Cristopher T. J. Hazy manifolds. (Italian summary) **(80g:57021)**
Dragon, N. Torsion and curvature in extended supergravity. **(80g:83032)**
Hamamoto, Shinji The structure of general covariance group on superspace. **(80i:81086)**
Kamefuchi, S. *See* **Omote, M., (80i:81023)**
Koriyama, Akira (*with* Maeda, Yoshiaki; Omori, Hideki) On Lie algebras of vector fields on expansive sets. **(80i:57019)**
Maeda, Yoshiaki *See* **Koriyama, Akira; et al., (80i:57019)**
Mielke, M. V. Sectional representation of multitopological spaces relative to a family of smoothness categories. **(80g:57041)**
Montesinos, Angel Geometry of spacetime founded on spacelike metric. **(80g:83003)**
Mulvey, Christopher J. Compact ringed spaces. **(80b:54016)**
Omori, Hideki *See* **Koriyama, Akira; et al., (80i:57019)**
Omote, M. (*with* Kamefuchi, S.) Para-Grassmann algebras and para-Fermi systems. **(80i:81023)**
Reyes, G. E. (*with* Wraith, G. C.) A note on tangent bundles in a category with a ring object. **(80f:18011)**
Smolin, Lee *See* **Dell, John, (80e:83015)**
Stelle, K. S. (*with* West, P. C.) de Sitter gauge invariance and the geometry of the Einstein-Cartan theory. **(80i:83036)**
West, P. C. *See* **Stelle, K. S., (80i:83036)**
Wraith, G. C. *See* **Reyes, G. E., (80f:18011)**

58A07 Real-analytic and Nash manifolds [See also 32C05.]

Church, P. T. Real analytic maps of manifolds into manifolds of one lower dimension. **80b:58002**

58A10 Differential forms

Bittner, R. (*with* Smentek, Z.) Exterior differential forms in operational calculus. **80k:58001**
Camacho, César Foliations with singularities and group actions. (Portuguese) **80e:58003**
Structural stability theorems for integrable differential forms on 3-manifolds. **80b:58003**
Cenkl, Bohumil (*with* Porter, Richard) Complétion de Lazard des groupes par des formes différentielles. (English summary) **80b:58004**
Golubitsky, Martin (*with* Tischler, David) A survey on the singularities and stability of differential forms. **80m:58001**
Klein, Tomáš Some properties of semibase Pfaffian forms on the tangent bundle. (Czech summary) **80b:58005**
Lata, Sneh *See* **Prakash, Nirmala, 80e:58004**
Mattei, Jean-François (*with* Moussu, Robert) Intégrales premières d'une forme de Pfaff analytique. (English summary) **80h:58003**
Moore, John Douglas (*with* White, James H.) Normal characteristic forms: conformal invariance and duality. **80b:58006**
Moussu, Robert *See* **Mattei, Jean-François, 80h:58003**
Ngô van Quê Formes singulières génériques. **80k:58002**
Picard, Rainer Ein Beitrag zur Theorie der harmonischen Differentialformen. **80f:58002**
Psevmatikos, Spyros N. Sur les 2-formes génériques et la propriété des zéros. (English summary) **80k:58003**
Porter, Richard *See* **Cenkl, Bohumil, 80b:58004**
Prakash, Nirmala (*with* Lata, Sneh) Generalised exterior derivations in framed manifolds. **80e:58004**
Samelson, Hans Note on the Lefschetz-Hodge operators. **80j:58002**
Sibner, L. M. (*with* Sibner, R. J.) Transonic flow on an axially symmetric torus. **80k:58004**
Sibner, R. J. *See* **Sibner, L. M., 80k:58004**
Smentek, Z. *See* **Bittner, R., 80k:58001**
Tischler, David *See* **Golubitsky, Martin, 80m:58001**
Turiel, Francisco Javier Modèles locaux de 3-formes fermées sur une variété de dimension 5. Cas transitif. (English summary) **80c:58002**
White, James H. *See* **Moore, John Douglas, 80b:58006**

Secondary classifications:

Baaklini, N. S. SL(2, C) exterior forms and quantum gravity. **(80b:83023)**
Bampi, Franco A note on the definition of spatial null volumes. (Italian summary) **(80j:83012)**
Chen, Kuo Tsai Circular bar construction. **(80j:57045)**
Chicone, Carmen C. *See* **Swanson, R. C., (80f:58015)**
Edelen, Dominic G. B. On the affine connections that give rise to a given curvature. **(80a:53014)**
Fichera, Gaetano Homology spaces of k-measures and related inequalities for differential forms. **(80k:58006)**
Golo, V. L. (*with* Perelomov, A. M.) A few remarks on chiral theories with sophisticated topology. **(80i:81029)**
Graf, Wolfgang Differential forms as spinors. **(80a:81064)**
Hermann, Robert "Modern" differential geometry in elementary particle physics (gauge fields, solitons, superspaces, quantum differential geometry, etc.). **(80a:81071)**
Imanishi, Hideki On codimension one foliations defined by closed one-forms with singularities. **(80k:57050)**
Israel, W. Differential forms in general relativity. **(80a:83011)**
Maglevannyĭ, I. I. Equations of electrodynamics in noninertial frames of reference. (Russian) **(80a:78009)**
Nöbeling, Georg ★Integralsätze der Analysis. **(80i:58002)**
Perelomov, A. M. *See* **Golo, V. L., (80i:81029)**
Picard, Rainer Zur Theorie der harmonischen Differentialformen. (English summary) **(80m:58002)**
Plebański, Jerzy F. The algebra generated by Hodge's star and external differential. **(80g:16016)**
Ryder, L. H. Dirac monopoles and the Hopf map $S^3 \to S^2$. **(80m:81117)**
Sternberg, Shlomo On the role of field theories in our physical conception of geometry. **(80g:81001)**
Swanson, R. C. (*with* Chicone, Carmen C.) Equivalence and slice theory for symplectic forms on closed manifolds. **(80f:58015)**
Thirring, Walter (*with* Wallner, R.) The use of exterior forms in field theory. **(80d:83002)**
The use of exterior forms in field theory. **(80c:81097)**
Wallner, R. *See* **Thirring, Walter, (80d:83002)**
von Westenholz, C. Topology of vortices. **(80i:81032)**

58A12 de Rham theory [See also 14Fxx.]

Chen, Kuo Tsai Iterated integration and loopspace cohomology. **80d:58003**
Path space differential forms and transports of connections. **80i:58003**
Clorana-Verona, Elena A de Rham theorem for generalised manifolds. **80k:58005**

Secondary classifications:

Aichelburg, P. C. (*with* Dereli, T.) First nontrivial exact solution of supergravity. **(80f:83022)**
Barut, A. O. Electromagnetic fields on manifolds: Betti numbers, monopoles and strings, minimal coupling. **(80d:78006)**
Chen, Kuo Tsai Erratum to: "Pullback de Rham cohomology of the free path fibrations" [Trans. Amer. Math. Soc. **242** (1978), 307–318; MR **57** #17678]. **(80k:55040)**
Dereli, T. *See* **Aichelburg, P. C., (80f:83022)**
Laurent-Thiébaut, Christine Une formule des résidus. (English summary) **(80e:32004)**
Negro, Angelo Some variational formulation of nonlinear magnetic field problems in multiply connected domains. (Italian summary) **(80e:78011)**
Sorkin, Rafael The quantum electromagnetic field in multiply connected space. **(80c:81132)**
Vinogradov, M. M. Algebraic de Rham and Spencer cohomology of smooth manifolds. (Russian) **(80i:58052)**

58A14 Hodge theory [See also 14C30, 14Fxx, 32Cxx.]

Fichera, Gaetano Homology spaces of k-measures and related inequalities for differential forms. **80k:58006**
Picard, Rainer Zur Theorie der harmonischen Differentialformen. (English summary) **80m:58002**

Secondary classifications:

Morgan, John W. Hodge theory for the algebraic topology of smooth algebraic varieties. **(80g:32013)**
Neisendorfer, Joseph (*with* Taylor, Laurence R.) Dolbeault homotopy theory. **(80f:32004)**
Taylor, Laurence R. *See* **Neisendorfer, Joseph, (80f:32004)**
Tsagas, Grigorios Harmonic and Killing tensor fields in pinched Riemannian manifolds with boundary. **(80i:53022)**

58A15 Exterior differential systems (Cartan theory)

Ablowitz, Mark J. (*with* Ramani, A.; Segur, Harvey) Nonlinear evolution equations and ordinary differential equations of Painlevé type. **80a:58001**
Dhooghe, Paul F. Le problème de Bäcklund: un fibré d'algèbre de Lie. (English summary) **80i:58004**
Gardner, Robert B. Constructing Bäcklund transformations. **80k:58007**
Haahti, Heikki (*with* Korhonen, Eero) Sur les équations différentielles

non-complètement intégrables. (English summary) **80h:58004**

Hermann, Robert A geometric version of scattering theory and Bäcklund transformations for second-order linear ordinary differential operators. **80k:58008**

Jacobowitz, Howard The Poincaré lemma for $d\omega = F(x, \omega)$. **80m:58003**

Kakié, Kunio Algebraic structures of characteristics in involutive systems of non-linear partial differential equations. **80b:58007**

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Lakshmanan, M. Rigid body motions, space curves, prolongation structures, fiber bundles, and solitons. **80g:58003**

Malgrange, B. Remarques sur les équations différentielles à points singuliers irréguliers (Séminaire Goulaouic-Schwartz 1976–1977). **80f:58003**

Morimoto, Tohru La géométrie des équations de Monge-Ampère. (English summary) **80f:58004**

Moussu, Robert Existence d'intégrales premières pour un germe de forme de Pfaff C^∞, non dégénéré. **80f:58006**

Okamoto, Kazuo Sur la convergence de solutions formelles d'équations différentielles avec singularités de première classe. **80k:58009**

Ramani, A. *See* **Ablowitz, Mark J.; et al., 80a:58001**

Roussarie, Robert Singularités des champs de vecteurs et existence d'intégrales premières. **80f:58005**

Rund, Hanno Evolution equations and curvature forms. I. Equations of the sine-Gordon type. **80j:58003a**

Evolution equations and curvature forms. II. Equations of the Korteweg-de Vries type. **80j:58003b**

Segur, Harvey *See* **Ablowitz, Mark J.; et al., 80a:58001**

Shadwick, W. F. The Bäcklund problem for the equation $\partial^2 z/\partial x^1 \partial x^2 = f(z)$. **80a:58002**

Séminaire:

Goulaouic-Schwartz *See* **Malgrange, B., 80f:58003**

Secondary classifications:

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Borcea, Ciprian Sorin Quasilinear analytic partial differential equations in involution. (Romanian. French summary) **(80h:35003)**

Bovet, D. The continuous theory of dislocations in elastostatics and elastodynamics. **(80d:73022)**

Bramson, B. D. The invariance of spin. **(80b:83016)**

Brihaye, Y. (*with* Fairlie, D. B.; Nuyts, J.; Yates, R. G.) Properties of the self-dual equations for an $SU(n)$ gauge theory. **(80c:81077)**

Carmeli, Moshe (*with* Kaye, Michael) Palatini-type variational principle for the $SL(2, C)$ gauge theory of gravitation. **(80a:83031)**

Čerednik, I. V. Local conservation laws for principal chiral fields ($d = 1$). (Russian. English summary) **(80g:81049)**

Chamorro, A. (*with* Chinea, F. J.) Generalized Galilei groups in classical dynamics. (Italian and Russian summaries) **(80b:70019)**

Chen, Shling Shen (*with* Peng, Jia Gui) Lie groups and KdV equations. **(80h:22025)**

Chinea, F. J. *See* **Chamorro, A., (80b:70019)**

Fairlie, D. B. *See* **Brihaye, Y.; et al., (80c:81077)**

Georgiev, Georgi Iv. (*with* Ignat, Margareta) A. Masotti motions. (Italian. English summary) **(80d:76100)**

Gerdžikov, V. S. (*with* Kulish, P. P.) Derivation of the Bäcklund transformation in the formalism of the inverse scattering problem. (Russian. English summary) **(80h:81009)**

Hainzl, J. Über die Gestalt von gruppeninvarianten linearen partiellen Differentialoperatoren. **(80a:35007)**

Hamitova, R. S. The basis of conservation laws in mechanics. (Russian) **(80k:70029)**

A basis of conservation laws for the equations of mechanics. (Russian) **(80m:35003)**

Harrison, B. Kent Bäcklund transformation for the Ernst equation of general relativity. **(80b:83009)**

Hirota, Ryogo The Bäcklund and inverse scattering transform of the K-dV equation with nonuniformities. **(80e:35057)**

Ignat, Margareta *See* **Georgiev, Georgi Iv., (80d:76100)**

Ikeda, Nobuyuki (*with* Manabe, Shojiro) Stochastic integral of differential forms and its applications. **(80d:60075)**

Kaye, Michael *See* **Carmeli, Moshe, (80a:83031)**

Konopel'čenko, B. G. Completely integrable equations: dynamical groups and their nonlinear realisations. **(80k:81065)**

Koopman, Bernard O. Entropy increase and group symmetry. **(80d:82015)**

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Langlois, M. Sur la mécanique analytique du corps solide. (English summary) **(80i:70004)**

Leibbrandt, G. Solitonlike solutions of the elliptic sine-cosine equation by means of harmonic functions. **(80b:35125)**

Malgrange, B. Remarques sur les équations différentielles à points singuliers irréguliers. **(80k:14019)**

Manabe, Shojiro *See* **Ikeda, Nobuyuki, (80d:60075)**

Mattei, Jean-François (*with* Moussu, Robert) Existence d'intégrales premières faibles d'un germe de forme intégrable, holomorphe. (English summary) **(80b:58044)**

McCarthy, Patrick J. Existence of strong Bäcklund transformations in four or more dimensions and generalization of a family of Bäcklund transformations. **(80a:81025)**

Miles, John W. On the second Painlevé transcendent. **(80b:34024)**

Morris, Hedley C. Bäcklund transformations and the sine-Gordon equation. **(80g:35116)**

Moussu, Robert *See* **Mattei, Jean-François, (80b:58044)**

Neugebauer, G. Bäcklund transformations of axially symmetric stationary gravitational fields. **(80a:83007)**

Neuman, František Invariants of third-order linear differential equations and the moving frame method of É. Cartan. (Russian) **(80h:34049)**

Nikolaenko, M. A. Characteristic lines of a first order quasilinear partial differential equation and the Pfaffian manifold. (Russian) **(80a:35024)**

Nova G., Lucimar Certain properties of complex differential equations with polynomial coefficients. (Spanish) **(80e:34002)**

Nuyts, J. *See* **Brihaye, Y.; et al., (80c:81077)**

Peng, Jia Gui *See* **Chern, Shling Shen, (80h:22025)**

Pommaret, Jean-François Physics and pseudogroups. **(80h:58060)**

Šabat, A. B. *See* **Žiber, A. V., (80k:35060)**

Strampp, W. Zur Lösung von partiellen Differentialgleichungen mit Hilfe von Transformationsgruppen. **(80k:35007)**

Ströembeck, Peter On left ideals in A_1 and their associated graded ideals. **(80f:16002)**

Suzuki, Masakazu Sur les intégrales premières de certains feuilletages analytiques complexes. **(80h:57038)**

Tenenblat, Keti (*with* Terng, Chuu Lian) A higher dimension generalization of the sine-Gordon equation and its Bäcklund transformation. **(80b:35129)**

Terng, Chuu Lian *See* **Tenenblat, Keti, (80b:35129)**

Vosylius, R. Categories of spaces with structure equations. (Russian. Lithuanian and English summaries) **(80b:58070)**

Ward, J. P. Interpretation of global integrability conditions for stationary Einstein-Maxwell equations. **(80j:83030)**

Yates, R. G. *See* **Brihaye, Y.; et al., (80c:81077)**

Žiber, A. V. (*with* Šabat, A. B.) The Klein-Gordon equation with nontrivial group. (Russian) **(80k:35060)**

58A17 Pfaffian systems

Airault, H. Rational solutions of Painlevé equations. **80e:58005**

Charrière, Hélène Systèmes de Pfaff. Étude formelle et C^∞ de certains systèmes de Pfaff singuliers. (English summary) **80m:58004**

Gérard, Raymond Solutions formelles et convergentes de certains systèmes de Pfaff analytiques avec singularités. **80h:58005**

Ladis, N. N. *See* **Vasilevič, N. D., 80i:58006**

Takano, Kyoichi A reduction theorem for a linear Pfaffian system with regular singular points. **80i:58005**

Vasilevič, N. D. (*with* Ladis, N. N.) Integrability of Pfaff's equations in CP^n. (Russian) **80i:58006**

Wagneur, Edouard Formes de Pfaff à singularités non dégénérées. (English summary) **80c:58003**

Secondary classifications:

Aomoto, Kazuhiko Fonctions hyperlogarithmiques et groupes de monodromie unipotents. **(80g:14016)**

Ardalan, Farhad Self-dual Euclidean gauge fields for semisimple groups. **(80a:81106)**

Barbašov, B. M. (*with* Nesterenko, V. V.; Červjakov, A. M.) Solitons in geometric field theories. (Russian. English summary) **(80f:81126)**

Bardos, C. Ondes solitaires et solitons. (Italian summary) **(80e:35054)**

Broucke, R. On Pfaff's equations of motion in dynamics; applications to satellite theory. **(80c:70025)**

Bruce, D. J. Bäcklund transformations and magnetic monopoles. **(80e:81068)**

Červjakov, A. M. *See* **Barbašov, B. M.; et al., (80f:81126)**

Gromak, V. I. Algebraic solutions of the third Painlevé equation. (Russian. English summary) **(80i:34004)**

Grudo, È. I. The stability of characteristic vectors of the solutions of linear homogeneous Pfaffian systems. (Russian) **(80g:34045)**

Representation of fundamental matrices of Pfaffian systems with coefficients that have uniform asymptotic expansions. (Russian) **(80i:35032)**

Analogues of the fundamental theorems of the first method of Ljapunov for Pfaffian systems. (Russian) **(80k:35010)**

(*with* Jančuk, L. F.) On the asymptotic stability of the equilibrium state of Pfaff systems. (Russian) **(80m:34046)**

Hamitova, R. S. The basis of conservation laws in mechanics. (Russian) **(80k:70029)**

Jančuk, L. F. Stability of the zero solution of Pfaffian systems in terms of generalized characteristic vectors. (Russian) **(80a:34071)**

See also **Grudo, È. I., (80m:34046)**

Kantor, Jean-Michel Solutions formelles d'équations différentielles algébriques. (English summary) **(80k:14017)**

Klarès, Bernard Sur la monodromie des systèmes de Pfaff du type de Fuchs sur $P_m(\mathbf{C})$. **(80k:32026)**

Lohe, M. A. Magnetic monopoles and Bäcklund transformations. **(80e:81067)**

Morris, Hedley C. Prolongation structures and nonlinear evolution equations in two spatial dimensions: a general class of equations. **(80e:81092)**

Nesterenko, V. V. *See* **Barbašov, B. M.; et al., (80f:81126)**

Neuman, František Global properties of the nth order linear differential equations. **(80d:34001)**

Okamoto, Kazuo Sur la convergence de solutions formelles d'équations différentielles avec singularités de première classe. **(80k:58009)**

Sibuya, Yasutaka Convergence of power series solutions of a linear Pfaffian system at an irregular singularity. **(80j:34009)**

58A20 Jets

Dhooghe, Paul F. Les transformations de contact sur un espace fibré de jets d'applications. (English summary) **80b:58008**

Epstein, D. B. A. (*with* Thurston, W. P.) Transformation groups and natural bundles. **80h:58006**

Guggenheimer, H. Contact elements, contact correspondences, and contact invariants. (Italian summary) **80k:58010**

Kolke, Satoshi . (*with* Kucharz, Wojciech) Sur les réalisations de jets non suffisants. (English summary) **80g:58004**

Kucharz, Wojciech *See* **Kolke, Satoshi, 80g:58004**

Leuci, Margherita (*with* Maida, Antonio) Higher order derivations in the tensor algebra of a differentiable manifold. (Italian. English summary) **80i:58007**

Maida, Antonio *See* Leuci, Margherita, **80i:58007**
Neagu, Alexandru C. The prolongations of G-spaces. (Italian summary) **80h:58007**
Pelczar, Andrzej Sufficiency of jets by the method of integral inequalities. **80g:58005**
Thurston, W. P. *See* Epstein, D. B. A., **80h:58006**
Tulczyjew, Włodzimierz M. A generalization of jet theory. (Russian summary) **80a:58003**

Secondary classifications:

Ando, Yoshifumi On integrability conditions on the space of sections of jet-bundles. **(80g:58016)**
Fichera, Gaetano Homology spaces of k-measures and related inequalities for differential forms. **(80k:58006)**
Krupka, Demeter Elementary theory of differential invariants. **(80g:53008)**
Neagu, Alexandru C. A geometric interpretation for the prolongation of a G-space. **(80g:57035)**
Spesivtsev, V. Lifting of tensor fields and connections to the space of r-jets. (Russian) **(80h:53032)**

58A25 Currents

Secondary classifications:

Bampi, Franco (*with* Massa, Enrico) A note on the definition of spatial volumes in relativistic continuum mechanics. (Italian summary) **(80c:83031)**
Massa, Enrico *See* Bampi, Franco, **(80c:83031)**
v. Westenholz, Cornelius Lois de conservation de Noether et courants topologiques. (English summary) **(80c:81052)**

58A30 Vector distributions (subbundles of the tangent bundles)

Buemi, Robert P. The generic dimension of the first derived system. (French summary) **80h:58008**
Fischer, Hans R. (*with* Williams, Floyd L.) Complex-foliated structures. I. Cohomology of the Dolbeault-Kostant complexes. **80g:58006**
Jackin, N. I. The Ljapunov-Floquet theorem and affine mappings. (Russian) **80m:58005**
Rawnsley, J. H. Flat partial connections and holomorphic structures in C^∞ vector bundles. **80g:58007**
Williams, Floyd L. *See* Fischer, Hans R., **80g:58006**

Secondary classifications:

Atiyah, Michael Francis (*with* Hitchin, N. J.; Singer, Isadore) Self-duality in four-dimensional Riemannian geometry. **(80d:53023)**
Dekrét, Anton Horizontal structures on fibre manifolds. (Russian summary) **(80g:53022)**
Hasanis, Thomas Minimal distributions on $\mathbf{R}^3$. **(80d:53005)**
Hitchin, N. J. *See* Atiyah, Michael Francis; et al., **(80d:53023)**
Manabe, Shojiro On the intersection number of the path of a diffusion and chains. **(80b:60102)**
Neagu, Alexandru C. Quasistructural distributions. (Romanian. English summary) **(80c:53035)**
Singer, Isadore *See* Atiyah, Michael Francis; et al., **(80d:53023)**

58A35 Stratified sets [See also 32Bxx, 58Cxx.]

Reiffen, Hans-Jörg (*with* Trapp, Heinz Wilhelm) Ein Beitrag zur Whitney-Regularität im unendlichdimensionalen Fall. **80g:58008**
Trapp, Heinz Wilhelm *See* Reiffen, Hans-Jörg, **80g:58008**

Secondary classifications:

Stasica, J. A transversality property weaker than the Whitney a-regularity. **(80i:32029)**
Takeuchi, Masaru On conjugate loci and cut loci of compact symmetric spaces. II. **(80k:53082)**

58A40 Differential spaces

Secondary classifications:

Finkelstein, David Holistic methods. **(80a:81002)**
Kowalczyk, Adam (*with* Kubarski, Jan) A local property of the subspaces of Euclidean differential spaces. **(80h:53006)**
Kubarski, Jan *See* Kowalczyk, Adam, **(80h:53006)**
Mielke, M. V. Sectional representation of multitopological spaces relative to a family of smoothness categories. **(80g:57041)**

58A99 None of the above, but in this section

Fedotov, V. P. Structures generated by invariants. (Russian. English summary) **80f:58007**
Lecomte, Pierre-Claude Derivations of linear endomorphisms of the tangent bundle. (French summary) **80i:58008**
Šerievskiĭ, I. A. Quantization in cotangent bundles. (Russian) **80h:58009**

Secondary classifications:

Coste, Michel *See* Coste-Roy, Marie-Françoise, **(80m:03112)**
Coste-Roy, Marie-Françoise (*with* Coste, Michel) The generic model of an e-stable geometric extension of the theory of rings is of line type. **(80m:03112)**
Isaev, G. V. (*with* Pervušin, V. N.; Puškin, S. V.) Dynamical affine symmetry and renormalisation in gravity. **(80h:83020)**
Kasuya, Masahiro On a quantization of Einstein-Cartan's theory with anticommuting variables in Dirac's Hamiltonian formalism. (Italian and Russian summaries) **(80k:83037)**
Madore, J. (*with* Richard, J. L.; Stora, R.) An introduction to the twistor programme. **(80f:83047)**
Pak, Namik K. (*with* Tze, Hsiung Chia) Chiral solitons and current algebra. **(80j:81038)**
Pervušin, V. N. *See* Isaev, G. V.; et al., **(80h:83020)**
Puškin, S. V. *See* Isaev, G. V.; et al., **(80h:83020)**
Richard, J. L. *See* Madore, J.; et al., **(80f:83047)**
Stora, R. *See* Madore, J.; et al., **(80f:83047)**
Tze, Hsiung Chia *See* Pak, Namik K., **(80j:81038)**
Vinogradov, M. M. Algebraic de Rham and Spencer cohomology of smooth manifolds. (Russian) **(80i:58052)**
Wadati, Miki Infinitesimal transformations and conservation laws; field theoretic approach to the theory of soliton. **(80d:35132)**

58Bxx Infinite-dimensional manifolds

Secondary classifications:

Tapero, T. B. Metric invariants of a pair of planes in infinite-dimensional spaces. (Russian) **(80m:47034)**

58B05 Homotopy and topological questions

Akin, Ethan ★The metric theory of Banach manifolds. **80g:58009**
Chapman, T. A. Constructing locally flat embeddings of infinite-dimensional manifolds without tubular neighborhoods. **80d:58004**

Secondary classifications:

Berstein, Israel (*with* West, J. E.) Based free compact Lie group actions on Hilbert cubes. **(80k:57025)**
Dobrowolski, Tadeusz Extension of Bessaga's negligibility technique to certain infinite-dimensional groups. (Russian summary) **(80k:57026)**
West, J. E. *See* Berstein, Israel, **(80k:57025)**

58B10 Differentiability questions

58B12 Questions of holomorphy [See also 32-XX, 46G20.]

Secondary classifications:

Estévez, Margarita (*with* Hervés, Carlos) Mesures gaussiennes complexes et fonctions plurisousharmoniques en dimension infinie. (English summary) **(80a:32012)**
Hayes, Sandra Weakly homogeneous infinite-dimensional manifolds. **(80k:32054)**
Hervés, Carlos *See* Estévez, Margarita, **(80a:32012)**
Tagirov, T. S. Properties of various kinds of analyticity for certain classes of complex infinite-dimensional spaces. (Russian) **(80d:46084)**

58B15 Fredholm structures [See also 47A53.]

Tromba, Anthony J. The Euler characteristic of vector fields on Banach manifolds and a globalization of Leray-Schauder degree. **80e:58006**

Secondary classifications:

Boutet de Monvel, Louis On the index of Toeplitz operators of several complex variables. **(80j:58063)**
Fujii, Kazuyuki A representation of complex K-groups by means of a Banach algebra. **(80d:55003)**
Tromba, Anthony J. The beer barrel theorem. **(80k:58029)**

58B20 Riemannian, Finsler and other geometric structures [See also 53C20, 53C60.]

Anastasie, Mihai Riemannian P-structures on vector bundle. **80d:58005**
Atkin, C. J. Bounded complete Finsler structures. I. **80d:58006**
Ekeland, Ivar The Hopf-Rinow theorem in infinite dimension. **80g:58010**
Haahti, Heikki Compact and small rank perturbations of conformally symplectic structures. **80h:58010**
Vassiliou, Efstathios On the infinite-dimensional holonomy theorem. **80m:58006**

Secondary classifications:

Akin, Ethan ★The metric theory of Banach manifolds. **(80g:58009)**
de Andrade, Rubens Leão Curvature and convexity. (Portuguese) **(80g:53001)**
Arca, Giuseppe (*with* Roşca, Radu) Variétés riemanniennes portant un couple de champs symplectiquement quasi-parallèles. (Italian summary) **(80k:53052)**
Brown, M. (*with* Gates, S. James, Jr.) Superspace Bianchi identities and the supercovariant derivative. **(80k:83026)**
Ekeland, Ivar Nonconvex minimization problems. **(80h:49007)**
Epstein, Kenneth J. Errata: "Affine connection in Hilbert space" (Internat. J. Theoret. Phys. **15** (1976), no. 10, 793–799). **(80f:81027)**
Gates, S. James, Jr. *See* Brown, M., **(80k:83026)**
Hennessux, Marc On geometrodynamics with tetrad fields. **(80g:83039)**
Roşca, Radu *See* Arca, Giuseppe, **(80k:53052)**
Taylor, John G. Quantizing super-Riemannian space. **(80a:83040)**

58B25 Group structures and generalizations on infinite-dimensional manifolds [See also 22E65, 58D05.]

Anastasie, Mihai Spin structures on Hilbert manifolds. **80g:58011**
Enflo, P. On infinite-dimensional topological groups. **80b:58009**
Seda, Anthony Karel Transformation groupoids and bundles of Banach spaces. **80k:58011**
Yamamuro, Sadayuki A note on Omori-Lie groups. **80f:58008**

58B99 None of the above, but in this section

Breuer, M. (*with* Marshall, Ch. D.) Banachian differentiable spaces. **80b:58010**
Haahti, Heikki (*with* Heikkilä, Seppo) On generalized parallel translations. **80a:58004**
Heikkilä, Seppo *See* **Haahti, Heikki, 80a:58004**
Marshall, Ch. D. *See* **Breuer, M., 80b:58010**

58Cxx Calculus on manifolds; nonlinear operators [See also 47Hxx.]

Secondary classifications:

Cit'lanaze, E. ★Mat'ematikuri analizis sap'uzvlegi p'unk'c'ionalur sivrc'eegli. (Georgian) [Principles of mathematical analysis in functional spaces] **(80g:46001)**

58C05 Real-valued functions

Reichard, Klaus Algebraische Beschreibung der Ableitung bei 9-mal stetig-differenzierbaren Funktionen. **80j:58004**

Secondary classifications:

Granger, Jean-Michel Sur le degré local d'un germe d'application analytique réelle. (English summary) **(80c:32008a)**
Guaraldo, Francesco (*with* Macrì, Patrizia) Some approximation problems for C^∞ functions. (Italian. English summary) **(80b:32021)**
Kuo, Tzee Char Une classification des singularités réelles. (English summary) **(80i:32034)**
Macrì, Patrizia *See* **Guaraldo, Francesco, (80b:32021)**
Semenov, V. I. On the representation of the superposition of certain classes of mappings. (Russian) **(80j:57036)**
Vainberg, M. M. On the subgradient of convex functionals. (Russian. English summary) **(80f:49020)**

58C06 Set valued and function-space valued mappings

Yoshikawa, Atsushi Abstract aspects of asymptotic analysis. **80j:58005**

Secondary classifications:

Brézis, Haïm (*with* Fraenkel, L. E.) A function with prescribed initial derivatives in different Banach spaces. **(80k:46047)**
Fraenkel, L. E. *See* **Brézis, Haïm, (80k:46047)**

58C07 Continuity properties of mappings

58C10 Holomorphic maps [See also 32–XX.]

Krée, Paul Méthodes holomorphes et méthodes nucléaires en analyse de dimension infinie et en théorie quantique des champs. **80g:58012**
Zelinskiĭ, Ju. B. Application of a local degree to the study of quasi-interior mappings. (Russian) **80b:58011**

Secondary classifications:

Krée, Paul Méthodes fonctorielles en analyse de dimension infinie et holomorphie anticommutative. **(80m:81045)**
Leiterer, Jürgen Local and global equivalence of meromorphic operator functions. I. **(80f:47008a)**
Local and global equivalence of meromorphic operator functions. II. **(80f:47008b)**
Lemaire, Luc Applications harmoniques de surfaces riemanniennes. **(80k:58024)**
de Matos, Mário Carvalho The uniform compact-ported topology on spaces of holomorphic mappings. (Portuguese) **(80g:46042)**
Mujica, Jorge Ideals of holomorphic functions on Fréchet spaces. **(80i:32026)**
Siu, Yum Tong Complex-analyticity of harmonic maps and strong rigidity of compact Kähler manifolds. **(80j:58031)**

58C15 Implicit function theorems; global Newton methods

Alexander, J. C. The topological theory of an embedding method. **80a:58005**
Chow, Shui Nee (*with* Mallet-Paret, John; Yorke, James A.) A homotopy method for locating all zeros of a system of polynomials. **80k:58012**
Garcia, C. B. (*with* Gould, F. J.) A theorem on homotopy paths. **80b:58011**
Gould, F. J. *See* **Garcia, C. B., 80b:58011**
Kiremidjian, Garo K. A Nash-Moser-type implicit function theorem and nonlinear boundary value problems. **80b:58012**
Kurapin, G. I. The implicit mapping theorem for certain topological modules. (Russian) **80k:58013**
Lelong, Pierre Un théorème de fonctions inverses dans les espaces vectoriels topologiques complexes et ses applications à des problèmes de croissance en analyse complexe. **80i:58009**
Łojasiewicz, S., Jr. (*with* Zehnder, E.) An inverse function theorem in Fréchet-spaces. **80k:58014**
Mallet-Paret, John *See* **Chow, Shui Nee; et al., 80k:58012**
Ombach, Jerzy Continuous dependence in the implicit function theorem. **80b:58013**
Tanabe, Kunio Continuous Newton-Raphson method for solving an underdetermined system of nonlinear equations. **80i:58010**
Yorke, James A. *See* **Chow, Shui Nee; et al., 80k:58012**
Zehnder, E. *See* **Łojasiewicz, S., Jr., 80k:58014**

Secondary classifications:

Adams, E. (*with* Ames, W. F.) On contracting interval iteration for nonlinear problems in $\mathbf{R}^n$. I. **(80g:65052)**
Altman, Mieczysław Contractor directions and evolution equations. **(80f:47055)**
Ames, W. F. *See* **Adams, E., (80g:65052)**
Arima, Naohiko *See* **Kojima, Masakazu; et al., (80g:55003)**
Bobileva, O. M. *See* **Rvačov, V. L., (80i:65059)**
Brézis, Haïm (*with* Fraenkel, L. E.) A function with prescribed initial derivatives in different Banach spaces. **(80k:46047)**
Edelen, Dominic G. B. Globally convergent differential procedures for solving nonlinear systems of equations. **(80b:65059)**
Fraenkel, L. E. *See* **Brézis, Haïm, (80k:46047)**
Garcia, C. B. (*with* Zangwill, W. I.) On univalence and *P*-matrices. **(80d:15022)**
(*with* Zangwill, W. I.) Finding all solutions to polynomial systems and other systems of equations. **(80f:65057)**
(*with* Gould, F. J.) Scalar labelings for homotopy paths. **(80m:90082)**
Gasqui, Jacques Connexions à courbure de Ricci donnée. **(80m:53028)**
Gould, F. J. *See* **Garcia, C. B., (80m:90082)**
Jittornrom, Krisorn An implicit function theorem. **(80b:26018)**
Keller, Herbert B. Global homotopies and Newton methods. **(80f:65059)**
Kojima, Masakazu (*with* Nishino, Hisakazu; Arima, Naohiko) A PL homotopy for finding all the roots of a polynomial. **(80g:55003)**
Komatsu, Hikosaburo The implicit function theorem for ultradifferentiable mappings. **(80e:58007)**
Kubíček, Milan (*with* Marek, Miloš) Evaluation of limit and bifurcation points for algebraic equations and nonlinear boundary-value problems. **(80d:65055)**
Li, Bang He Global structure of shock waves. **(80f:35121)**
Marek, Miloš *See* **Kubíček, Milan, (80d:65055)**
Nishino, Hisakazu *See* **Kojima, Masakazu; et al., (80g:55003)**
Raeburn, Iain An implicit function theorem in Banach spaces. **(80i:32016)**
Reeken, Michael Classical solutions of the chain equation. I. **(80f:35115a)**
Classical solutions of the chain equation. II. **(80f:35115b)**
Rvačov, V. L. (*with* Bobileva, O. M.) A generalized Taylor formula of difference type. (Russian. English summary) **(80i:65059)**
Saigal, R. (*with* Shin, Y. S.) Perturbations in fixed point algorithms. **(80j:65020)**
Saut, Jean-Claude (*with* Temam, Roger) Generic properties of nonlinear boundary value problems. **(80i:35080)**
Schaeffer, David G. An application of the Nash-Moser theorem to a free boundary problem. **(80c:35067)**
Scheurle, Jürgen Bifurcation of a stationary solution of a dynamical system into n-dimensional tori of quasiperiodic solutions. **(80k:34061)**
Seydel, Rüdiger Numerical computation of branch points in nonlinear equations. **(80m:65044)**
Shin, Y. S. *See* **Saigal, R., (80j:65020)**
Temam, Roger *See* **Saut, Jean-Claude, (80i:35080)**
Zangwill, W. I. *See* **Garcia, C. B., (80d:15022)** *and* **Garcia, C. B., (80f:65057)**

58C20 Differentiation theory (Gâteaux, Fréchet, etc.) [See also 26Exx, 46Gxx.]

Abatzoglou, Theagenis J. The minimum norm projection on C^2-manifolds in $\mathbf{R}^n$. **80a:58006**
Fabián, Marian Concerning a geometrical characterization of Fréchet differentiability. (Czech and Russian summaries) **80d:58007**
Hain, Richard M. A characterization of smooth functions defined on a Banach space. **80b:58014**
Harnos, Zs. On the geometric characterization of differentiation in normed vector spaces. **80j:58006**
Hiriart-Urruty, Jean-Baptiste Tangent cones, generalized gradients and mathematical programming in Banach spaces. **80i:58011**
Komatsu, Hikosaburo The implicit function theorem for ultradifferentiable mappings. **80e:58007**
Lebourg, Gérard Generic differentiability of Lipschitzian functions. **80i:58012**
Ludwig, Klaus Differenzierbare Funktionen auf kompakten metrischen Räumen. **80b:58012**
Penot, Jean-Paul The use of generalized subdifferential calculus in optimization theory. **80j:58007**
(*with* Théra, Michel) Semi-continuité des applications et des multiapplications. (English summary) **80m:58007**
Seip, Ulrich A convenient setting for differential calculus. **80b:58013**
Seppälä, Veikko On infinitesimal calculus within a class of topological near-algebras. (French summary) **80d:58008**
Simonnet, Michel Éléments d'intégration sur les variétés. **80e:58008**
Théra, Michel *See* **Penot, Jean-Paul, 80a:58007**
Thibault, Lionel Sous-différentiels de fonctions vectorielles compactement lipschitziennes. (English summary) **80b:58014**

Secondary classifications:

Hyers, D. H. A note on Fréchet's definition of "polynômes abstraits". **(80b:46059)**

Phelps, R. R. Gaussian null sets and differentiability of Lipschitz map on Banach spaces. (80m:46040)
Quinn, M. D. Lagrange's theorem for weak functions of several variables. (80d:46070)
Rockafellar, R. Tyrrell Clarke's tangent cones and the boundaries of closed sets in $\mathbf{R}^n$. (80d:49032)
Directionally Lipschitzian functions and subdifferential calculus. (80j:46070)
Yamamuro, Sadayuki A note on Omori-Lie groups. (80f:58008)

58C25 Differentiable maps

Alexander, J. C. (*with* Yorke, James A.) Parametrized functions, bifurcation, and vector fields on spheres. (Russian summary) 80i:58013
Antoine, Philippe Image réciproque d'un point par une application différentiable en un point critique. (English summary) 80d:58009
Arnol'd, V. I. Critical points of functions on a manifold with boundary, the simple Lie groups B_k, C_k, F_4 and singularities of evolutes. (Russian) 80j:58008
Bryzgalova, L. N. The maximum functions of a family of functions that depend on parameters. (Russian) 80g:58013
Craioveanu, Mircea A theorem on polynomial maps. (Romanian summary) 80m:58007
Drexler, F. J. A homotopy method for the calculation of all zeros of zero-dimensional polynomial ideals. 80f:58009
Dufour, Jean-Paul Stabilité simultanée de deux fonctions différentiables. (English summary) 80f:58010
Iljuščkin, N. V. Polynomial representation of smooth matrix-valued functions. (Russian. French summary) 80g:58014
Kurapin, G. I. A theorem on local invertibilty of differential mappings of some topological modules. (Russian) 80m:58008
Prodanov, Ivan The measure of the image of a differentiable mapping. (Bulgarian summary) 80k:58015
Tidten, Michael Fortsetzungen von C^∞-Funktionen, welche auf einer abgeschlossenen Menge in $\mathbf{R}^n$ definiert sind. (English summary) 80k:58016
Wachta, Krystyna Sur un espace complet de champs tayloriens réguliers. 80g:58015
Wells, G. S. A geometric splitting and the C^∞ stability of maps from semianalytic sets. 80c:58004
Yorke, James A. *See* **Alexander, J. C.**, 80i:58013

Secondary classifications:

Araujo, Aloisio (*with* Mas-Colell, Andreu) Notes on the smoothing of aggregate demand. (80a:90032)
Church, P. T. (*with* Timourian, J. G.) Differentiable maps with small critical set or critical set image. (80b:57030)
Colin de Verdière, Yves (*with* Vey, Jacques) Le lemme de Morse isochore. (80k:57059)
Droste, Bernd Beitrag zum Divisionsproblem für Ultradistributionen und ein Fortsetzungssatz. (English summary) (80j:46065)
Isnard, Carlos Augusto S. The Brouwer degree. (Portuguese) (80k:55010)
Kawamura, Yoshiaki Invertibility of Lipschitz continuous mappings and its application to electrical network equations. (80k:26010)
Mas-Colell, Andreu *See* **Araujo, Aloisio**, (80a:90032)
Timourian, J. G. *See* **Church, P. T.**, (80b:57030)
Tsagas, Grigorios On the spectrum of the Laplacian on the 1-forms on a compact Riemannian manifold. (80b:58066)
Vey, Jacques *See* **Colin de Verdière, Yves**, (80k:57059)

58C27 Singularities of differentiable maps [See also 14B05, 14E15, 32Bxx, 32C40, 32C45.]

Ando, Yoshifumi On integrability conditions on the space of sections of jet-bundles. 80g:58016
On a decomposition of Thom-Boardman singularities of order two. 80m:58009
Azevedo, Paulo Roberto F. *See* **Volpe, Celso; et al.**, 80k:58026
Belickiĭ, G. R. Equivalence and normal forms of germs of smooth mappings. (Russian) 80k:58017
Invariant normal forms of formal series. (Russian) 80i:58014
Normal forms in relation to the filtering action of a group. (Russian) 80k:58018
Berezovskaja, F. S. The index of a stationary point of a vector field in the plane. (Russian) 80i:58015
Bochnak, Jacek (*with* Kucharz, Wojciech) Sur les germes d'applications differentiables à singularités isolées. 80j:58009
Bruce, J. W. Stratifying jet spaces—some special cases. 80d:58010
Damon, James Investigating the topological stratification of jet spaces. 80k:58019
Topological properties of discrete algebra types. I. The Hilbert-Samuel function. 80e:58009
Topological properties of discrete algebra types. II. Real and complex algebras. 80k:58020
Topological stability in the nice dimensions. 80k:58015
von Essen, Erik On stability of C^∞ mappings of manifolds with boundary. 80d:58011
Fukuda, Takuo *See* **Ujihara Fukuda, Masako**, 80h:58016
Gaffney, Terence A note on the order of determination of a finitely determined germ. 80j:58010
Gibson, C. G. ★Singular points of smooth mappings. 80j:58011
Grin', A. N. The membership of a mapping in a certain class. (Russian) 80i:58016
von Grudzinski, Olaf Remarque sur l'équivalence à droite des germes d'applications différentiables. (English summary) 80f:58011
Hale, Jack K. Bifurcation with several parameters. 80d:58012
Jänich, Klaus Symmetry properties of singularities of C^∞-functions. 80k:58021
(*with* Michaelis, Diethard) Die Universalität der Kuspoiden. 80k:58022
Global families of local unfoldings. 80f:58012
Kucharz, Wojciech *See* **Bochnak, Jacek**, 80j:58009
Magnus, R. J. Universal unfoldings in Banach spaces: reduction and stability. 80k:58023
Michaelis, Diethard *See* **Jänich, Klaus**, 80k:58022
Platonova, O. A. The shadow and terminator of a hypersurface in general position. (Russian) 80j:58012
Ronga, Felice Une application topologiquement stable qui ne peut pas être approchée par une application différentiablement stable. (English summary) 80f:58014
da Silva, Euripides Alves *See* **Volpe, Celso; et al.**, 80k:58026
Sotomayor, J. Singularities of differentiable mappings. (Portuguese) 80k:58024
Thom, René Gradients of analytic functions. 80k:58025
Trotman, D. J. A. Stability of transversality to a stratification implies Whitney (a)-regularity. 80b:58015
Tu, N. A. Lokale topologische Eigenschaften der auf Banachmannigfaltigkeiten definierten differenzierbaren Funktionen. 80d:58013
Ujihara Fukuda, Masako (*with* Fukuda, Takuo) Algebras $Q(f)$ determine the topological types of generic map-germs. 80h:58016
Volpe, Celso (*with* da Silva, Euripides Alves; Azevedo, Paulo Roberto F.) Contact equivalence. (Portuguese. English summary) 80k:58026
Wall, C. T. C. Are maps finitely determined in general? 80j:58013

Secondary classifications:

Arkeryd, Leif Thom's theorem for Banach spaces. (80k:58027)
Arnol'd, V. I. Critical points of functions on a manifold with boundary, the simple Lie groups B_k, C_k, F_4 and singularities of evolutes. (Russian) (80j:58008)
Brieskorn, E. Die Hierarchie der 1-modularen Singularitäten. (English summary) (80k:14005)
Brüggemann, R. (*with* Voitländer, J.) Konsequenzen einer abbildungstheoretischen Deutung von Hückel-Parametern für die Diskussion von Charge-Transfer-Effekten in Dreizentrensystemen. (English summary) (80h:81081)
Chaperon, Marc Singularités en géométrie de contact. (80k:58103)
Linéarisation C^∞ des germes d'actions C^∞ de $\mathbf{Z}^k \times \mathbf{R}^m$. (English summary) (80m:58027)
Chenciner, A. Stabilité structurelle et ergodicité (ou catégorie et mesure). (English summary) (80j:58001).
Church, P. T. (*with* Timourian, J. G.) Differentiable maps with small critical set or critical set image. (80b:57030)
Real analytic maps of manifolds into manifolds of one lower dimension. (80b:58002)
Damodaran, K. A. *See* **Rajan, S. C.**, (80c:76029)
Durfee, Alan H. Fifteen characterizations of rational double points and simple critical points. (80m:14003)
Dutton, John A. *See* **Vickroy, James G.**, (80e:86004)
Françoise, Jean-Pierre Modèle local simultané d'une fonction et d'une forme de volume. (English summary) (80k:32013)
Golubitsky, Martin (*with* Tischler, David) A survey on the singularities and stability of differential forms. (80m:58001)
(*with* Schaeffer, David G.) Imperfect bifurcation in the presence of symmetry. (80j:58017)
(*with* Schaeffer, David G.) A theory for imperfect bifurcation via singularity theory. (80j:58061)
Granger, Michel Additif à la note: "Sur le degré local d'un germe d'application analytique réelle" (C. R. Acad. Sci. Paris Sér. A–B 287 (1978), no. 7, A531–A534). (80c:32008b)
Hefez, A. The relations among analytic, differentiable and formal codimension. (Italian summary) (80k:32017)
Hovanskiĭ, A. G. The index of a polynomial vector field. (Russian) (80f:58033)
Huseyin, K. *See* **Mandadi, V.**, (80e:73040)
Ichiraku, Shigeo On singular points of electrical circuits. (80b:94035)
Izumiya, Shyuichi Homotopy classification of equivariant regular sections. (80k:57041)
Kolke, Satoshi (*with* Kucharz, Wojciech) Sur les réalisations de jets non suffisants. (English summary) (80g:58004)
Kucharz, Wojciech *See* **Kolke, Satoshi**, (80g:58004)
Kuo, Tzee Char Une classification des singularités réelles. (English summary) (80i:32034)
Laloy, M. On the inversion of the Lagrange-Dirichlet theorem in the case of an analytic potential. (French and German summaries) (80h:58040)
Lee, C. W. Topology change in general relativity. (80e:83012)
Malikov, H. M. A versal integral of type A_k and a maximally overdetermined system. (Russian. Tajiki summary) (80k:32024)
Mandadi, V. (*with* Huseyin, K.) Nonlinear instability behaviour of nongradient systems. (80e:73040)
Moussu, Robert Existence d'intégrales premières pour un germe de forme de Pfaff C^∞, non dégénéré. (80f:58006)
Ngô van Quê Formes singulières génériques. (80k:58002)
Nikulin, V. V. Integer symmetric bilinear forms and some of their geometric applications. (Russian) (80j:10031)
Oka, Mutsuo On the bifurcation of the multiplicity and topology of the Newton boundary. (80h:32018)
Pelczar, Andrzej Sufficiency of jets by the method of integral inequalities. (80g:58005)
Pnevmatikos, Spyros N. Sur les 2-formes génériques et la propriété des zéros. (English summary) (80k:58003)
Polemarchakis, Herakilis M. More on economies with a finite set of Walrasian equilibria. (80a:90025)
Rajan, S. C. (*with* Damodaran, K. A.) Hodograph transformation. (80c:76029)
Reiffen, Hans-Jörg (*with* Trapp, Heinz Wilhelm) Ein Beitrag zur Whitney-Regularität im unendlichdimensionalen Fall. (80g:58008)
Roussarie, Robert Singularités des champs de vecteurs et existence d'intégrales premières. (80f:58005)
Schaeffer, David G. *See* **Golubitsky, Martin**, (80j:58017) *and* **Golubitsky, Martin**, (80j:58061)
Stanica, J. A transversality property weaker than the Whitney a-regularity. (80i:32029)

Saúcs, A. Analogue of the Thom space for mappings with singularity of type Σ^1. (Russian) **(80k:57064)**
Takens, Floris Singularities of vectorfields and bifurcations. **(80e:58033)**
Timourian, J. G. *See* **Church, P. T., (80b:57030)**
Tischler, David *See* **Golubitsky, Martin, (80m:58001)**
Trapp, Heinz Wilhelm *See* **Reiffen, Hans-Jörg, (80g:58008)**
Upstill, C. Light caustics from rippling water. **(80e:78003)**
Vickroy, James G. (*with* Dutton, John A.) Bifurcation and catastrophe in a simple, forced, dissipative quasi-geostrophic flow. **(80e:86004)**
Voitländer, J. *See* **Brüggemann, R., (80h:81081)**
Wall, C. T. C. Affine cubic functions. I. The complex plane. **(80h:14011)**
Wan, Yieh Hei On the structure and stability of local Pareto optima in a pure exchange economy. **(80a:90027)**
On the algebraic criteria for local Pareto optima. II. **(80a:58018)**
Wells, G. S. A geometric splitting and the C^∞ stability of maps from semianalytic sets. **(80c:58004)**
Wood, John C. Erratum: "Singularities of harmonic maps and applications of the Gauss-Bonnet formula" [Amer. J. Math. 99 (1977), no. 6, 1329–1344; MR 58 #18539]. **(80m:58014)**

58C28 Catastrophes [See also 57R70, 58Exx.]

Arkeryd, Leif Thom's theorem for Banach spaces. **80k:58027**
Bruter, C. P. The theory of catastrophes: some epistemological aspects. **80b:58016**
Dubois, Jean-Guy (*with* Dufour, Jean-Paul) La théorie des catastrophes. V. Transformées de Legendre et thermodynamique. **80d:58014**
Dufour, Jean-Paul *See* **Dubois, Jean-Guy, 80d:58014**
Gilmore, R. Catastrophe time scales and conventions. **80k:58028**
Petitot, J. Caustiques et catastrophes. (English summary) **80j:58014**
Sur le modèle historique de Thom-Pomian. (English summary) **80j:58015**
Poston, Tim On deducing the presence of catastrophes. (French summary) **80j:58016**
Sewell, M. J. A pure catastrophe machine. **80b:58017**
Sussmann, Héctor J. (*with* Zahler, Raphael S.) A critique of applied catastrophe theory in the behavioral sciences. **80b:58018**
Thom, René Catastrophe theory and its applications. **80d:58015**
Tectonique des plaques et théorie des catastrophes. (English summary) **80m:58010**
Thompson, J. M. T. Stability predictions through a succession of folds. **80m:58011**
Woodcock, A. E. R. Landscapes of change: catastrophe theory and biological processes. **80f:58013**
Zahler, Raphael S. *See* **Sussmann, Héctor J., 80b:58018**

Secondary classifications:

Agrawal, G. P. (*with* Carmichael, H. J.) Optical bistability through nonlinear dispersion and absorption. **(80d:78003)**
Balasko, Yves The behavior of economic equilibria: a catastrophe theory approach. **(80b:90016)**
(Branis, F. H., Jr.) *See* **Problem analysis in science and engineering, (80h:00004)**
Brüggemann, R. (*with* Voitländer, J.) Zur Unabhängigkeit und Wohldefiniertheit der Hückel-Parameter. (English summary) **(80k:81188)**
Carmichael, H. J. *See* **Agrawal, G. P., (80d:78003)**
Ebeling, W. (*with* Malchow, H.) Bifurcations in a bistable reaction-diffusion system. (German summary) **(80h:35012)**
(Eikemeier, Horst) *See* **Structural stability in physics, (80j:00017)**
Fararo, Thomas J. An introduction to catastrophes. **(80b:90001)**
(Güttinger, Werner) *See* **Structural stability in physics, (80j:00017)**
(Huseyin, K.) *See* **Problem analysis in science and engineering, (80h:00004)**
Jänich, Klaus Symmetry properties of singularities of C^∞-functions. **(80k:58021)**
(*with* Michaelis, Diethard) Die Universalität der Kuspoiden. **(80k:58022)**
Jumarie, Guy Relativity, information, catastrophe and subjectivity. A unified approach to general systems. **(80k:93005)**
Magnus, R. J. Universal unfoldings in Banach spaces: reduction and stability. **(80k:58023)**
Malchow, H. *See* **Ebeling, W., (80h:35012)**
Michaelis, Diethard *See* **Jänich, Klaus, (80k:58022)**
Nye, J. F. Optical caustics from liquid drops under gravity: observations of the parabolic and symbolic umbilics. **(80h:78002)**
Poston, Tim (*with* Stewart, Ian) Nonlinear modeling of multistable perception. **(80b:92047)**
Stewart, Ian *See* **Poston, Tim, (80b:92047)**
Sussmann, Héctor J. (*with* Zahler, Raphael S.) Catastrophe theory as applied to the social and biological sciences: a critique. **(80h:58001)**
Voitländer, J. *See* **Brüggemann, R., (80k:81188)**
Zahler, Raphael S. *See* **Sussmann, Héctor J., (80h:58001)**
Catastrophe theory *See* **Structural stability in physics, (80j:00017)**
Conference:
Problem Analysis in Science and Engineering *See* **Problem analysis in science and engineering, (80h:00004)**
Problem analysis in science and engineering ★Problem analysis in science and engineering. **(80h:00004)**
Structural stability in physics ★Structural stability in physics. **(80j:00017)**
Symposia:
Applications of Catastrophe Theory and Topological Concepts in Physics *See* **Structural stability in physics, (80j:00017)**
Topological concepts in physics *See* **Structural stability in physics, (80j:00017)**
Tübingen *See* **Structural stability in physics, (80j:00017)**
Waterloo, Ont. *See* **Problem analysis in science and engineering, (80h:00004)**

58C30 Fixed point theorems [See also 47H10.]

Hahn, Siegfried Zur Theorie kompakter Vektorfelder in topologischen Vektorräumen. **80a:58008**
Tromba, Anthony J. The beer barrel theorem. **80k:58029**

Secondary classifications:

Abduvaitov, H. A. A formula for the computation of the rotation of a class of vector fields. (Russian. Tajiki summary) **(80g:47072)**
Alexander, J. C. The topological theory of an embedding method. **(80a:58005)**
Beauzamy, Bernard Approximation des optima de Pareto. **(80j:58029)**
Bobylev, N. A. An approximation method for introducing rotation for certain classes of continuous vector fields. (Russian) **(80j:47065)**
Eisenack, Günther (*with* Fenske, Christian) ★Fixpunkttheorie. **(80g:58001)**
Fenske, Christian *See* **Eisenack, Günther, (80g:58001)**
Górniewicz, Lech (*with* Peitgen, Heinz-Otto) Degeneracy, nonejective fixed points and the fixed point index. **(80k:55004)**
Hirsh, Morris W. (*with* Smale, Stephen) On algorithms for solving $f(x)=0$. **(80b:65061)**
Isnard, Carlos Augusto S. The Brouwer degree. (Portuguese) **(80k:55010)**
Mawhin, Jean ★Topological degree methods in nonlinear boundary value problems. **(80c:47055)**
Peitgen, Heinz-Otto *See* **Górniewicz, Lech, (80k:55004)**
Smale, Stephen *See* **Hirsh, Morris W., (80b:65061)**
Tarafdar, E. (*with* Teo, Suat Khoh) On the existence of solutions of the equation $Lx \in Nx$ and a coincidence degree theory. **(80m:47062)**
Teo, Suat Khoh *See* **Tarafdar, E., (80m:47062)**
Watson, Layne T. Fixed points of C^2 maps. **(80c:55002)**
Solving the nonlinear complementarity problem by a homotopy method. **(80h:65035)**

58C35 Integration on manifolds; measures on manifolds [See also 28Cxx.]

Secondary classifications:

Klauder, John R. New measures for nonrenormalizable quantum field theory. **(80b:81033)**
Krée, Paul Calcul d'intégrales et de dérivées en dimension infinie. **(80k:46051)**
Kuo, Hui Hsiung Differential calculus for measures on Banach spaces. **(80c:46052)**
The chain rule for differentiable measures. **(80d:46089)**

58C40 Spectral theory; eigenvalue problems

Duistermaat, J. J. The light in the neighborhood of a caustic. **80b:58019**
Golubitsky, Martin (*with* Schaeffer, David G.) Imperfect bifurcation in the presence of symmetry. **80j:58017**
Iannacci, R. The spectrum for nonlinear multivalued maps via approximations. (Italian summary) **80e:58010**
Schaeffer, David G. *See* **Golubitsky, Martin, 80j:58017**

Secondary classifications:

Dancer, E. N. On nonradially symmetric bifurcation. **(80k:35009)**
Furi, M. (*with* Martelli, Mario; Vignoli, A.) Contributions to the spectral theory for nonlinear operators in Banach spaces. (Italian summary) **(80k:47070)**
Martelli, Mario *See* **Furi, M.; et al., (80k:47070)**
Mininni, Michele A spectral approach to local solvability of some nonlinear equations in normed spaces. **(80a:47099)**
Vignoli, A. *See* **Furi, M.; et al., (80k:47070)**

58C99 None of the above, but in this section

Lehmann, J. Über Distributionen auf Vektorbündeln. I. **80g:58017a**
Über Distributionen auf Vektorbündeln. II. **80g:58017b**

Secondary classifications:

Dybov, G. P. Introduction of rotation for a class of many-valued operators. (Russian) **(80k:47063)**
Greene, R. E. (*with* Wu, H.) C^∞ approximations of convex, subharmonic, and plurisubharmonic functions. **(80m:53055)**
Hoàng Tuy *See* **Phạm Cảnh Du'o'ng, (80j:49016)**
Phạm Cảnh Du'o'ng (*with* Hoàng Tuy) Stability, surjectivity and local invertibility of nondifferentiable mappings. **(80j:49016)**
Rzepecki, Bogdan Some properties of the set of solutions of an operator equation in a Banach space. **(80d:47095)**
Wu, H. *See* **Greene, R. E., (80m:53055)**

58Dxx Spaces and manifolds of mappings (including nonlinear versions of 46Exx)

58D05 Groups of diffeomorphisms and homeomorphisms as manifolds [See also 22E65, 57Q05.]

Albeverio, Sergio (*with* Høegh-Krohn, Raphael) The energy representation of Sobolev-Lie groups. **80i:58017**
Banyaga, Augustin The group of diffeomorphisms preserving a regular contact form. **80a:58009**
Sur la structure du groupe des difféomorphismes qui préservent une forme symplectique. **80c:58005**

On the structure of the automorphism group of a toral action. **80f:58018**

Brooks, Robert (*with* Trauber, Philip) The van Est theorem for groups of diffeomorphisms. **80b:58020**

Chicone, Carmen C. *See* **Swanson, R. C., 80f:58015**

Hœgh-Krohn, Raphael *See* **Albeverio, Sergio, 80f:58017**

Ismagilov, R. S. Central extension of the group of volume-preserving diffeomorphisms as the inductive limit of the groups of diffeomorphisms of coordinate neighborhoods. (Russian) **80m:58012**

Lukackiĭ, A. M. Curvature of a group of diffeomorphisms that preserve the measure of a two-dimensional sphere. (Russian) **80h:58017**

The system of generators of the group of diffeomorphisms of an n-dimensional torus. (Russian) **80k:58030**

McDuff, Dusa The lattice of normal subgroups of the group of diffeomorphisms or homeomorphisms of an open manifold. **80c:58006**

Rousseau, Guy Difféomorphismes d'une variété symplectique non compacte. **80a:58010**

Smolencev, N. K. A weak Riemannian structure on a group of diffeomorphisms. (Russian) **80j:58018**

Swanson, R. C. (*with* Chicone, Carmen C.) Equivalence and slice theory for symplectic forms on closed manifolds. **80f:58015**

Trauber, Philip *See* **Brooks, Robert, 80b:58020**

Secondary classifications:

Arms, Judith M. Linearization stability of gravitational and gauge fields. **(80b:81067)**

Bergmann, Peter G. (*with* Komar, Arthur B.) Modified supersymmetries. **(80a:81125)**

Borisov, A. B. The unitary representations of the Diff $\mathbf{R}^N$ group. **(80j:22010)**

Burghelea, Dan Automorphisms of manifolds. **(80g:57001)**

Choquet-Bruhat, Yvonne (*with* Christodoulou, Demetrios; Francaviglia, Mauro) Cauchy data on a manifold. **(80i:83010)**

Christodoulou, Demetrios *See* **Choquet-Bruhat, Yvonne; et al., (80i:83010)**

Delorme, P. Irreductibilité de certaines représentations de $G^{(X)}$. **(80a:22022)**

Dwyer, William G. (*with* Szczarba, Robert H.) Sur l'homotopie des groupes de difféomorphismes. (English summary) **(80j:57028)**

Francaviglia, Mauro Applications of infinite-dimensional differential geometry to general relativity. **(80c:83036)**

See also **Choquet-Bruhat, Yvonne; et al., (80i:83010)**

Hajduk, Bogusław On the homotopy type of diffeomorphism groups of homotopy spheres. (Russian summary) **(80g:57044)**

Komar, Arthur B. *See* **Bergmann, Peter G., (80a:81125)**

Lichnerowicz, André Remarques sur deux théorèmes de Banyaga. (English summary) **(80b:58036)**

Singer, Isadore Some remarks on the Gribov ambiguity. **(80d:53025)**

Solodov, V. V. A geometric proof of a theorem of Mather. (Russian) **(80h:57037)**

Szczarba, Robert H. *See* **Dwyer, William G., (80j:57028)**

Yamamuro, Sadayuki A note on Omori-Lie groups. **(80f:58008)**

58D07 Groups and semigroups of nonlinear operators [See also 17B65, 47Dxx, 47H20.]

Segal, I. E. General properties of the Yang-Mills equations in physical space. **80a:58011**

Secondary classifications:

Brézis, Haïm Asymptotic behavior of some evolution systems. **(80f:47060)**

58D10 Spaces of imbeddings and immersions

Bourgeois, Gérald (*with* Spring, David) Groupes d'homotopie de l'espace des plongements propres d'une n-variété ouverte dans une m-variété ouverte. (English summary) **80b:58021**

Greene, R. E. (*with* Shiohama, Katsuhiro) Diffeomorphisms and volume-preserving embeddings of noncompact manifolds. **80k:58031**

Shiohama, Katsuhiro *See* **Greene, R. E., 80k:58031**

Spring, David *See* **Bourgeois, Gérald, 80b:58021**

Secondary classifications:

Källén, Anders Isometric embedding of a smooth compact manifold with a metric of low regularity. **(80c:53064)**

Wells, G. S. Immersions of semianalytic spaces. **(80b:57029)**

Wintgen, Peter Über von höherer Ordnung reguläre Immersionen. **(80c:53070)**

58D15 Manifolds of mappings [See also 54C35.]

Albeverio, Sergio (*with* Hœgh-Krohn, Raphael) Topics in infinite dimensional analysis. **80g:58018**

Chaljub-Simon, Alice (*with* Choquet-Bruhat, Yvonne) Solutions asymptotiquement euclidiennes de l'équation de Lichnerowicz. (English summary) **80b:58022**

Choquet-Bruhat, Yvonne *See* **Chaljub-Simon, Alice, 80b:58022**

Craioveanu, Mircea Properties of reflection in global analysis. (Romanian) **80f:58016**

Graff, Richard A. Elements of nonlinear functional analysis. **80j:58019**

Hansen, Vagn Lundsgaard On a theorem of Al'ber on spaces of maps. **80c:58007**

The homotopy type of the space of maps of a homology 3-sphere into the 2-sphere. **80k:58032**

Hœgh-Krohn, Raphael *See* **Albeverio, Sergio, 80g:58018**

Lazzeri, Fulvio Morse theory on the complement of a submanifold. (Italian. French summary) **80h:58018**

Secondary classifications:

Aubin, Thierry Sur les meilleures constantes dans le théorème d'inclusion de Sobolev. (English summary) **(80c:58029)**

Cantor, Murray A necessary and sufficient condition for York data to specify an asymptotically flat spacetime. **(80k:83018)**

Fursikov, A. V. First integrals and the integrability of systems of quasilinear equations. (Russian) **(80a:35082)**

58D17 Manifolds of metrics (esp. Riemannian)

Arms, Judith M. (*with* Marsden, Jerrold E.) The absence of Killing fields is necessary for linearization stability of Einstein's equations. **80j:58020**

Atiyah, Michael Francis (*with* Jones, John D. S.) Topological aspects of Yang-Mills theory. **80j:58021**

Jones, John D. S. *See* **Atiyah, Michael Francis, 80j:58021**

Marsden, Jerrold E. *See* **Arms, Judith M., 80j:58020**

Maxim-Răileanu, Liliana The manifold of symplectic structures on a compact manifold. **80k:58033**

Secondary classifications:

Beem, John K. (*with* Ehrlich, Paul E.) Singularities, incompleteness and the Lorentzian distance function. **(80b:83040)**

Chicone, Carmen C. *See* **Swanson, R. C., (80f:58015)**

Christodoulou, Demetrios (*with* Francaviglia, Mauro) Some dynamical properties of Einstein space-times admitting a Gaussian foliation. **(80f:83034)**

Drinfel'd, V. G. (*with* Manin, Ju. I.) A description of instantons. **(80c:81061)**

Ehrlich, Paul E. *See* **Beem, John K., (80b:83040)**

Francaviglia, Mauro *See* **Christodoulou, Demetrios, (80f:83034)**

Koiso, Norihito A decomposition of the space $\mathfrak{M}$ of Riemannian metrics on a manifold. **(80g:53034)**

Manin, Ju. I. *See* **Drinfel'd, V. G., (80c:81061)**

Swanson, R. C. (*with* Chicone, Carmen C.) Equivalence and slice theory for symplectic forms on closed manifolds. **(80f:58015)**

58D20 Measures (Gaussian, cylindrical, etc.) on manifolds of maps [See 28Cxx.]

Secondary classifications:

Aref'eva, I. Ja. The gauge field as chiral field on the path and its integrability. **(80f:81036)**

Babelon, O. (*with* Viallet, C.-M.) The geometrical interpretation of the Faddeev-Popov determinant. **(80k:81077)**

Banerji, S. Bounce of spheres in Einstein-Cartan theory. **(80a:83037)**

Bertrand, Jacqueline (*with* Irac-Astaud, M.) Non-uniqueness in writing Schrödinger kernel as a functional integral. **(80c:81033)**

Combe, Ph. (*with* Rodriguez, R.) On the cylindrical approximation of the Feynman path integral. **(80b:81037)**

Deininghaus, U. (*with* Graham, R.) Nonlinear point transformations and covariant interpretation of path integrals. **(80k:81037)**

Dekker, H. Functional integration and the Onsager-Machlup Lagrangian for continuous Markov processes in Riemannian geometries. **(80f:82003)**

DeWitt-Morette, Cecile A reasonable method for computing path integrals on curved spaces. **(80k:81038)**

Duru, I. H. (*with* Kleinert, H.) Solution of the path integral for the H-atom. **(80c:81034)**

Gedalin, È. V. Application of the path integral method to the cascade theory of showers. (Russian. English and Georgian summaries) **(80j:81024)**

Graham, R. *See* **Deininghaus, U., (80k:81037)**

Irac-Astaud, M. *See* **Bertrand, Jacqueline, (80c:81033)**

Itô, Kiyosi Stochastic analysis in infinite dimensions. **(80k:60073)**

Kashiwa, Taro *See* **Ohnuki, Yoshio, (80d:81029)**

Kleinert, H. *See* **Duru, I. H., (80c:81034)**

Krée, Paul Methods of functional analysis in the study of random phenomena. **(80f:60008)**

Feynman path integral and theory of forms. **(80k:81044)**

McKane, A. J. (*with* Wallace, D. J.) Instanton calculations using dimensional regularisation. **(80c:81070)**

Ohnuki, Yoshio (*with* Kashiwa, Taro) Coherent states of Fermi operators and the path integral. **(80d:81029)**

Page, Don N. Positive-action conjecture. **(80a:83061)**

Parker, Leonard Path integrals for a particle in curved space. **(80b:81039)**

Rodriguez, R. *See* **Combe, Ph., (80b:81037)**

Viallet, C.-M. *See* **Babelon, O., (80k:81077)**

Wallace, D. J. *See* **McKane, A. J., (80c:81070)**

58D25 Equations in function spaces; evolution equations [See also 34Gxx, 35K22, 35R15.]

Secondary classifications:

Arms, Judith M. Linearization stability and a globally singular change of variables. **(80m:35007a)**

Blakeley, W. T. F. (*with* Pritchard, Anthony J.) Stability of abstract evolution equations. **(80g:34064)**

De Blasi, F. S. (*with* Myjak, J.) The generic property of existence of solutions for a class of multivalued differential equations in Hilbert spaces. **(80h:34076)**

Faddeev, L. D. *See* **Izergin, A. G.; et al., (80j:81048)**

Izergin, A. G. (*with* Korepin, V. E.; Semenov-Tjan-Šanskiĭ, M. A.; Faddeev, L. D.) Gauge conditions for a Yang-Mills field. (Russian. English summary) **(80j:81048)**

Kielhöfer, Hansjörg Generalized Hopf bifurcation in Hilbert space. **(80k:58037)**

Komeč, A. I. *See* **Višik, M. I., (80g:35128)** *and* **Višik, M. I., (80j:35090)**

Korepin, V. E. *See* **Izergin, A. G.; et al., (80j:81048)**

Myjak, J. *See* **De Blasi, F. S., (80b:34076)**
Nikolov, K. I. Analyticity of the solutions of differential equations with a variable operator coefficient. (Russian) **(80i:35174)**
Pritchard, Anthony J. *See* **Blakeley, W. T. F., (80g:34064)**
Šavgulidze, E. T. The direct equation of Kolmogorov for measures in a Hilbert scale of spaces. (Russian. English summary) **(80j:60113)**
Scheffer, Vladimir The Navier-Stokes equations in space dimension four. **(80i:35148)**
Segal, I. E. General properties of the Yang-Mills equations in physical space. **(80a:58011)**
Semenov-Tjan-Šanskiĭ, M. A. *See* **Izergin, A. G.; et al., (80j:81048)**
Uglanov, A. V. On a construction of the Feynman integral. (Russian) **(80g:81019)**
Vilĭk, M. I. (*with* Komeč, A. I.) The solvability of the Cauchy problem for Kolmogorov's direct equation that corresponds to a stochastic equation of Navier-Stokes type. (Russian) **(80g:35128)**
(*with* Komeč, A. I.) The Cauchy problem for infinite-dimensional second-order parabolic differential equations. (Russian) **(80j:35090)**

58D30 Applications (in quantum mechanics (Feynman integrals), relativity, fluid dynamics, etc.)

Dupré, Maurice J. (*with* Rosencrans, Steven I.) Classical and relativistic vorticity in a semi-Riemannian manifold. **80b:58023**
Rosencrans, Steven I. *See* **Dupré, Maurice J., 80b:58023**
Schoen, Richard M. (*with* Yau, Shing Tung) Complete manifolds with nonnegative scalar curvature and the positive action conjecture in general relativity. **80k:58034**
Yau, Shing Tung *See* **Schoen, Richard M., 80k:58034**

Secondary classifications:

Albeverio, Sergio (*with* Hoegh-Krohn, Raphael) Topics in infinite dimensional analysis. **(80g:58018)**
Arms, Judith M. Linearization stability of gravitational and gauge fields. **(80b:81067)**
Ashtekar, Abhay (*with* Xanthopoulos, Basilis C.) Isometries compatible with asymptotic flatness at null infinity: a complete description. **(80e:83010)**
Canter, Murray A necessary and sufficient condition for York data to specify an asymptotically flat spacetime. **(80k:83018)**
Combe, Ph. (*with* Rodriguez, R.) On the cylindrical approximation of the Feynman path integral. **(80b:81037)**
Denardo, G. (*with* Spallucci, E.) Observer-dependent effects in a uniform electrovacuum space-time. **(80a:83041)**
Dohrn, Daniela (*with* Guerra, Francesco; Ruggiero, Patrizia) Spinning particles and relativistic particles in the framework of Nelson's stochastic mechanics. **(80m:81028)**
Doroškevič, A. G. (*with* Novikov, I. D.) Space-time and physical fields inside a black hole. **(80a:83058)**
Finkelstein, David *See* **de Ritis, R.; et al., (80a:83052)**
Flaherty, Francis J. (*with* Kerlick, G. David) Inhomogeneous local gauge transformations in spacetimes with torsion. **(80e:81058)**
The boundary value problem for maximal hypersurfaces. **(80j:53059)**
Francaviglia, Mauro Applications of infinite-dimensional differential geometry to general relativity. **(80c:83036)**
Friedman, John L. Ergosphere instability. **(80a:83067)**
Frolov, V. P. Quantum field theory in asymptotically flat space-time. **(80d:81143)**
Gibbons, G. W. On functional integrals in curved spacetime. **(80d:81027)**
Grib, A. A. (*with* Mamaev, S. G.; Mostepanenko, V. M.) Creation of pairs of particles in an expanding isotropic universe. (Russian) **(80b:83036)**
Guerra, Francesco *See* **Dohrn, Daniela; et al., (80m:81028)**
Guo, Han Ying Unified actions for gauge fields and gravitational fields. (Chinese) **(80a:81130)**
Hoegh-Krohn, Raphael *See* **Albeverio, Sergio, (80g:58018)**
Kay, Bernard S. Linear spin-zero quantum fields in external gravitational and scalar fields. I. A one particle structure for the stationary case. **(80c:83038)**
Kerlick, G. David *See* **Flaherty, Francis J., (80e:81058)**
Kolerov, G. I. Quantization and global properties of manifolds. **(80h:81064)**
Langouche, F. (*with* Roekaerts, D.; Tirapegui, E.) Higher-order corrections through functional integrals to the WKB expansion in curved spaces. **(80j:81021)**
Mamaev, S. G. *See* **Grib, A. A.; et al., (80b:83036)**
Marinov, M. S. (*with* Terent'ev, M. V.) A functional integral on unitary groups. **(80b:81023)**
Marshall, John T. (*with* Pell, John L.) Path-integral evaluation of the space-time propagator for quadratic Hamiltonian systems. **(80h:81020)**
Massa, Enrico Relative continuum mechanics in general relativity. I. Kinematical foundations. (Italian summary) **(80a:83045)**
McCrea, J. D. (*with* O'Brien, G.) Spin precession in the relativistic two-body problem. **(80d:83032)**
Menskiĭ, M. B. Application of the group of paths to the gauge theory and quarks. **(80m:81095)**
Moncrief, Vincent Quantum linearization instabilities. **(80e:83018)**
Gribov degeneracies: Coulomb gauge conditions and initial value constraints. **(80d:81091)**
Mostepanenko, V. M. *See* **Grib, A. A.; et al., (80b:83036)**
Nambu, Y. Topological problems in gauge theories. **(80d:81122)**
Narlikar, J. V. Quantum fluctuations near the classical space-time singularity. **(80b:83021)**
Novikov, I. D. *See* **Doroškevič, A. G., (80a:83058)**
O'Brien, G. *See* **McCrea, J. D., (80d:83032)**
Palmer, T. N. Momentum transfer in gravitation theory. **(80h:83017)**
Pell, John L. *See* **Marshall, John T., (80h:81020)**
Pirilä, P. (*with* Preinajder, P.) Static spherically symmetric solutions of the classical Yang-Mills equations. **(80a:81080)**
Pisello, Daniel M. *See* **de Ritis, R.; et al., (80a:83052)**
Preinajder, P. *See* **Pirilä, P., (80a:81080)**
de Ritis, R. (*with* Finkelstein, David; Pisello, Daniel M.; Weil, D.) Local conserved currents in unified field theory. (Italian summary) **(80a:83052)**
Robinett, Loris Do tachyons travel more slowly than light? **(80d:83089)**
Rodriguez, R. *See* **Combe, Ph., (80b:81037)**
Roekaerts, D. *See* **Langouche, F.; et al., (80j:81021)**
Ruggiero, Patrizia *See* **Dohrn, Daniela; et al., (80m:81028)**
Segal, I. E. General properties of the Yang-Mills equations in physical space. **(80a:58011)**
Singer, Isadore Some remarks on the Gribov ambiguity. **(80d:53025)**
Spallucci, E. *See* **Denardo, G., (80a:83041)**
Terent'ev, M. V. *See* **Marinov, M. S., (80b:81023)**
Tirapegui, E. *See* **Langouche, F.; et al., (80j:81021)**
Truman, Aubrey Erratum: "The Feynman maps and the Wiener integral" (J. Math. Phys. **19** (1978), no. 8, 1742–1750). **(80f:81035)**
Uglanov, A. V. On a construction of the Feynman integral. (Russian) **(80g:81019)**
Weil, D. *See* **de Ritis, R.; et al., (80a:83052)**
Xanthopoulos, Basilis C. *See* **Ashtekar, Abhay, (80e:83010)**

58D99 None of the above, but in this section

Cantor, Murray Some problems of global analysis on asymptotically simple manifolds. **80j:58022**

Secondary classifications:

Edelen, Dominic G. B. On the affine connections that give rise to a given curvature. **(80a:53014)**
Elworthy, K. D. Stochastic dynamical systems and their flows. **(80e:60074)**
Jang, Pong Soo On the positivity of energy in general relativity. **(80b:83012a)**
Erratum: "On the positivity of energy in general relativity" (J. Math. Phys. **19** (1978), no. 5, 1152–1155). **(80b:83012b)**
Mosolova, M. V. A new formula for $\ln(e^A e^B)$ in terms of the commutators of the elements A and B. (Russian) **(80b:46058)**
Seda, Anthony Karel Quelques résultats dans la catégorie des groupoïdes d'opérateurs. (English summary) **(80b:22005)**

58Exx Variational problems in infinite-dimensional spaces

Secondary classifications:

Bobylev, N. A. *See* **Krasnosel'skiĭ, M. A.; et al., (80b:49012)**
Krasnosel'skiĭ, M. A. (*with* Bobylev, N. A.; Muhamadiev, E.) The topological index of extremals of the functionals of the calculus of variations. (Russian. Tajiki summary) **(80b:49012)**
Muhamadiev, E. *See* **Krasnosel'skiĭ, M. A.; et al., (80b:49012)**
Rawnsley, J. H. Differential geometry of instantons. **(80d:81081)**
Rosso, Fabio A comparison between Schmidt and Geroch space-time incompleteness. (Italian summary) **(80g:83009)**

58E05 Abstract critical point theory (Morse theory, Ljusternik-Schnirelman (Šnirel'man) theory, etc.)

Benci, Vieri (*with* Rabinowitz, Paul H.) Critical point theorems for indefinite functionals. **80i:58019**
Brink-Spalink, J. (*with* Jongen, H. Th.) Morse theory for optimization problems with functions of maximum type. **80f:58017**
(Cairns, Stewart S.) *See* **Morse, Marston, 80g:58019**
Jongen, H. Th. *See* **Brink-Spalink, J., 80f:58017**
Marsden, Jerrold E. Qualitative methods in bifurcation theory. **80a:58012**
Mawhin, Jean Recent trends in nonlinear boundary value problems. **80b:58024**
Mesirov-Kazdan, Jill P. Perturbation theory for condition (C) in the calculus of variations. **80h:58019**
A classification for polynomial Lagrangians. **80e:58011**
Morse, Marston The Fréchet numbers of the differentiable product of two compact, connected, smooth manifolds. **80g:58019**
Lacunary type number sequences in global analysis. **80k:58035**
Mutō, Yosio Index of some Gauss-critical submanifolds. **80e:58012**
Nishida, Takaaki A note on a theorem of Nirenberg. **80a:58013**
Pitcher, Everett Counting focal points and characteristic roots. **80g:58020**
Rabinowitz, Paul H. *See* **Benci, Vieri, 80i:58019**

Secondary classifications:

Amann, Herbert Nichtlineare Randwertprobleme. **(80d:35058)**
Conlon, Joseph G. A theorem in ordinary differential equations with an application to hyperbolic conservation laws. **(80m:35054)**
Fujiwara, Daisuke A remark on the Hadamard variational formula. **(80i:35060)**
Gupta, Chaitan P. Periodic solutions for coupled first-order systems of ordinary differential equations. **(80i:34059)**
James, I. M. On category, in the sense of Lusternik-Schnirelmann. **(80i:55001)**
Martins, Roberto Vieira Sur la classification des orbites périodiques instables d'après Poincaré. (English summary) **(80b:70035)**
Palmore, Julian I. Central configurations of the n-body problem in E^4. **(80c:70010)**
Prüfer, Michael Calculating global bifurcation. **(80g:65058)**
Rabinowitz, Paul H. A variational method for finding periodic solutions of differential equations. **(80b:34043)**
Serrin, James The concepts of thermodynamics. **(80g:80002)**
Shelton, Robert Orrin Noncollision singularities in the four-body problem. **(80c:70011)**
Simó, Carlos Relative equilibrium solutions in the four-body problem. **(80d:70020)**
Smirnov, S. V. *See* **Zabreĭko, P. P., (80m:47063)**

Spinedi, Carlo Die thermodynamischen Grundlagen der Kontinuumsmechanik (Vergleich zwischen verschiedenen Zugängen). (English summary) **(80c:80004)**

Thews, Klaus Multiple solutions for elliptic boundary value problems with odd nonlinearities. **(80d:35064)**

Zabreiko, P. P. (*with* Smickih, S. V.) On the problem of calculating the index of a zero singular point of completely continuous vector fields with positive operators. (Russian) **(80m:47063)**

58E07 Abstract bifurcation theory

Alexander, J. C. Bifurcation of zeroes of parametrized functions. **80j:58023**
(*with* Yorke, James A.) Calculating bifurcation invariants as elements in the homotopy of the general linear group. **80a:58014**
Numerical continuation methods and bifurcation. **80k:58036**
(*with* Auchmuty, J. F. G.) Global bifurcation of waves. **80g:58021**

Auchmuty, J. F. G. *See* **Alexander, J. C., 80g:58021**

Berzdyko, V. I. Bifurcation of positive periodic states (the subfurcation phenomenon). (Russian. Tajiki summary) **80j:58024**

Chow, Shui Nee (*with* Mallet-Paret, John; Yorke, James A.) Global Hopf bifurcation from a multiple eigenvalue. **80a:58015**

Collatz, Lothar Verzweigungsdiagramme und Hypergraphen. **80d:58016**

Keener, James P. Secondary bifurcation and multiple eigenvalues. **80j:58025**

Keller, Herbert B. Constructive methods for bifurcation and nonlinear eigenvalue problems. **80m:58013**

Kielhöfer, Hansjörg Generalized Hopf bifurcation in Hilbert space. **80k:58037**

Küpper, Tassilo (*with* Riemer, Dieter) Necessary and sufficient conditions for bifurcation from the continuous spectrum. **80k:58038**

Lev, Avshalom Branching of solutions of equations in Banach spaces without multiplicity assumptions. **80a:58016**

List, Stephen E. Generic bifurcation with application to the von Kármán equations. **80e:58013**

Loginov, B. V. Invariants and invariant solutions in bifurcation theory. (Russian) **80j:58026**
Problems of bifurcation theory that are invariant with respect to the group of motions of $\mathbf{R}^l$. (Russian. Uzbek summary) **80g:58022a**
Letter to the editors: "Problems of bifurcation theory that are invariant with respect to the group of motions of $\mathbf{R}^{l}$" (Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk 1978, no. 3, 20–23). (Russian) **80g:58022b**

Mallet-Paret, John *See* **Chow, Shui Nee; et al., 80a:58015**

Miersemann, Erich Über höhere Verzweigungspunkte nichtlinearer Variationsungleichungen. **80e:58014**

Nicolaenko, Basil A general class of nonlinear bifurcation problems from a point in the essential spectrum. Application to shock wave solutions of kinetic equations. **80g:58023**

Potier-Ferry, Michel Bifurcation et stabilité pour des systèmes dérivant d'un potentiel. (English summary) **80e:58015**
Perturbed bifurcation theory. **80i:58020**

Riemer, Dieter *See* **Küpper, Tassilo, 80k:58038**

Rosenblat, S. Asymptotic methods for bifurcation and stability problems. **80k:58039**

Sattinger, D. H. Group-theoretic methods in bifurcation theory. **80i:58021**
Bifurcation from rotationally invariant states. **80j:58027**

Vanderbauwhede, André L. Generic and nongeneric bifurcation for the von Kármán equations. **80e:58016**
Generic bifurcation and symmetry with an application to the von Kármán equations. **80f:58018**

Wegner, Bernd Ein globales Ergebnis für Bifurkationsaufgaben mit schwach differenzierbaren Operatoren. **80h:58020**

Yorke, James A. *See* **Alexander, J. C., 80a:58014** *and* **Chow, Shui Nee; et al., 80a:58015**

Secondary classifications:

Adamov, V. G. The structure of generating solutions of nonlinear equations. (Russian) **(80k:47071)**

Alsengendler, P. G. (*with* Vaĭnberg, M. M.) The branching and stability of periodic solutions of differential equations with a nonanalytic right-hand side. (Russian) **(80i:34098)**

Alexander, J. C. The topological theory of an embedding method. **(80a:58005)**

Bader, Peter Variational method for the Hartree equation of the helium atom. **(80d:81037)**

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Büttiker, M. (*with* Thomas, H.) Stability of nonuniform states in systems exhibiting continuous bifurcation. **(80k:82029)**

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Furi, M. (*with* Martelli, Mario; Vignoli, A.) Contributions to the spectral theory for nonlinear operators in Banach spaces. (Italian summary) **(80k:47070)**

Golubitsky, Martin (*with* Schaeffer, David G.) Imperfect bifurcation in the presence of symmetry. **(80j:58017)**
(*with* Schaeffer, David G.) A theory for imperfect bifurcation via singularity theory. **(80j:58061)**

Haf, H. Meromorphe Zweige von Lösungen bei asymptotisch linearen Operatorgleichungen. **(80a:47096)**

Hale, Jack K. Bifurcation with several parameters. **(80d:58012)**
Lyapunov-Schmidt method in differential equations. **(80i:47086)**
Bifurcation from simple eigenvalues for several parameter families. **(80d:47092)**

Hetzer, Georg (*with* Stallbohm, Volker) Global behavior of bifurcation branches and the essential spectrum. **(80g:47076)**

Huseyin, K. *See* **Mandadi, V., (80e:73040)**

Husták, Petr (*with* Kubíček, Milan; Marek, Ivo; Marek, Miloš) Bifurcation in reaction-diffusion systems. **(80i:35014)**

Jeggle, Hansgeorg Existence and discrete approximation of bifurcation points. **(80a:47102)**

Jiang, Bo Ju *See* **Zhang, Gong Qing, (80b:47081)**

Kubíček, Milan *See* **Husták, Petr; et al., (80i:35014)**

Kučera, Milan A new method for obtaining eigenvalues of variational inequalities based on bifurcation theory. (Czech summary) **(80m:49010)**

Loginov, B. V. (*with* Rusak, Ju. B.) Generalized Jordan structure in bifurcation theory. (Russian) **(80i:47026)**
Invariant solutions in the theory of branching. (Russian) **(80j:47081)**

Magnus, R. J. Universal unfoldings in Banach spaces: reduction and stability. **(80h:58023)**

Mandadi, V. (*with* Huseyin, K.) Nonlinear instability behaviour of nongradient systems. **(80e:73040)**

Marek, Ivo *See* **Husták, Petr; et al., (80i:35014)**

Marek, Miloš *See* **Husták, Petr; et al., (80i:35014)**

Martelli, Mario *See* **Furi, M.; et al., (80k:47070)**

McKenna, P. J. *See* **Cesari, Lamberto, (80c:47053)**

Noll, Walter A general framework for problems in the statics of finite elasticity. **(80d:73026)**

North, Gerald R. *See* **Cahalan, Robert F., (80k:86008)**

Peitgen, Heinz-Otto (*with* Prüfer, Michael) The Leray-Schauder continuation method is a constructive element in the numerical study of nonlinear eigenvalue and bifurcation problems. **(80k:55007)**

Prüfer, Michael *See* **Peitgen, Heinz-Otto, (80k:55007)**

Rosenblat, S. Asymmetric bifurcation. **(80j:35008)**

Rusak, Ju. B. *See* **Loginov, B. V., (80i:47026)**

Schaeffer, David G. *See* **Golubitsky, Martin, (80j:58017)** *and* **Golubitsky, Martin, (80j:58061)**

Škarka, V. A theorem concerning the diagrams in the dynamics of correlations. I. (French summary) **(80m:82035a)**
A theorem concerning the diagrams in the dynamics of correlations. II. **(80m:82035b)**

Stallbohm, Volker *See* **Hetzer, Georg, (80g:47076)**

Thomas, H. *See* **Büttiker, M., (80k:82029)**

Vaĭnberg, M. M. *See* **Alsengendler, P. G., (80i:34098)**

Varol, Yaakov L. *See* **Westreich, David, (80h:47072)**

Vignoli, A. *See* **Furi, M.; et al., (80k:47070)**

Walther, Hans-Otto A theorem on the amplitudes of periodic solutions of differential delay equations with applications to bifurcation. **(80g:34081)**

Westreich, David (*with* Varol, Yaakov L.) Numerical bifurcation at simple eigenvalues. **(80h:47072)**

Zhang, Gong Qing (*with* Jiang, Bo Ju) Multiple solutions for asymptotic linear operators. (Chinese) **(80b:47081)**

58E10 Applications to the theory of geodesics (problems in one independent variable)

Ballmann, Werner Der Satz von Lusternik und Schnirelmann. **80d:58017**

Bolton, John The Morse index theorem in the case of two variable end-points. **80b:58025**

Everson, J. (*with* Talbot, C. J.) Erratum: "Morse theory on timelike and causal curves" (General Relativity and Gravitation **7** (1976), no. 7, 609–621). **80b:58026**

Grove, Karsten (*with* Halperin, Stephen; Vigué-Poirrier, Micheline) The rational homotopy theory of certain path spaces with applications to geodesics. **80g:58024**

Halperin, Stephen *See* **Grove, Karsten; et al., 80g:58024**

Hasegawa, Takuichi The index theorem of geodesics on a Riemannian manifold with boundary. **80b:58027**

Hayashi, Kiyoshi Subordinated homology classes of a path space. **80h:58021**

Klingenberg, Wilhelm Closed geodesics on surfaces of genus 0. **80f:58019**

Mercuri, Francesco On the rational cohomology of the spaces of unparametrized closed curves. (Italian summary) **80k:58040**
The critical points theory for the closed geodesics problem. **80d:58018**
The space of free loops. (Portuguese) **80j:58028**

Sakai, Takashi The manifold of the Lagrangean subspaces of a symplectic vector space. **80b:58028**

Talbot, C. J. *See* **Everson, J., 80b:58026**

Thorbergsson, Gudlaugur Nonhyperbolic closed geodesics. **80i:58022**

Vigué-Poirrier, Micheline *See* **Grove, Karsten; et al., 80g:58024**

Secondary classifications:

Ekeland, Ivar The Hopf-Rinow theorem in infinite dimension. **(80g:58010)**

Heintze, Ernst (*with* Karcher, Hermann) A general comparison theorem with applications to volume estimates for submanifolds. **(80i:53026)**

Karcher, Hermann *See* **Heintze, Ernst, (80i:53026)**

Matthias, Hans-Heinrich Eine Finslermetrik auf S^2 mit nur zwei geschlossenen Geodätischen. **(80d:53042)**

Stone, David A. On the path space of a simplicial complex. **(80j:57018)**

Tromba, Anthony J. The Euler characteristic of vector fields on Banach manifolds and a globalization of Leray-Schauder degree. **(80e:58006)**

58E11 Critical metrics

58E12 Applications to minimal surfaces (problems in two independent variables)

Duo Čong Thi Minimal surfaces in compact Lie groups. (Russian) **80a:58017**
Nikolaev, I. G. Solution of the Plateau problem in spaces of curvature at most *K*. (Russian) **80k:58041**
Petrola de Melo Jorge, Luquesio The classical Plateau problem: generic questions. (Portuguese) **80f:58020**
Rassias, Themistocles M. On the Morse-Smale index theorem and the stability of minimal surfaces. **80k:58042**
Steffen, Klaus (*with* Wente, Henry C.) The nonexistence of branch points in solutions to certain classes of Plateau type variational problems. **80k:58043**
Tomi, Friedrich Plateau's problem for embedded minimal surfaces of the type of the disc. **80c:58008**
Wente, Henry C. *See* **Steffen, Klaus, 80k:58043**

Secondary classifications:

Barbosa, João Lucas Marquès Remarks on stability of minimal hypersurfaces. **(80e:53057)**
Comtet, A. Instantons and minimal surfaces. **(80a:81067)**
Ichida, Ryosuke On uniqueness for existence of minimal hypersurfaces with a given boundary in a Riemannian manifold. **(80g:53041)**
Lawson, H. Blaine, Jr. (*with* Osserman, Robert) Non-existence, non-uniqueness and irregularity of solutions to the minimal surface system. **(80b:35059)**
Miklyukov, V. M. A new approach to the Bernšteĭn theorem and to related questions of equations of minimal surface type. (Russian) **(80e:53005)**
Milani, A. Nonanalytic minimal varieties. (Italian summary) **(80d:53035)**
Osserman, Robert *See* **Lawson, H. Blaine, Jr., (80b:35059)**
Tomi, Friedrich (*with* Tromba, Anthony J.) Extreme curves bound embedded minimal surfaces of the type of the disc. **(80k:53011)**
Tromba, Anthony J. *See* **Tomi, Friedrich, (80k:53011)**

58E15 Application to extremal problems in several variables

Aubin, Jean-Pierre Propriété de Perron-Frobenius pour des correspondances. (English summary) **80b:58029**
Dedecker, Paul Problèmes variationnels dégénérés. (English summary) **80b:58030**
Fomenko, A. T. Multidimensional Plateau problems on Riemannian manifolds and extraordinary homology and cohomology theories. II. (Russian) **80e:58017**
Ioffe, Alexandre D. Regular points of Lipschitz functions. **80h:58022**
Jongen, H. Th. (*with* Jonker, P.; Twilt, F.) On Newton flows in optimization. **80k:58044**
Jonker, P. *See* **Jongen, H. Th.; et al., 80k:58044**
Penot, Jean-Paul Calcul sous-différentiel et optimisation. **80e:58018**
Twilt, F. *See* **Jongen, H. Th.; et al., 80k:58044**

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Arnsen, Moritz Variational theory of Riemannian subspaces. **(80c:53012)**
Audounet, Jacques (*with* Bancel, Daniel) Ensembles à bord spatial d'une variété lorentzienne. (English summary) **(80k:53096)**
Bancel, Daniel *See* **Audounet, Jacques, (80k:53096)**
Brink-Spalink, J. (*with* Jongen, H. Th.) Morse theory for optimization problems with functions of maximum type. **(80f:58017)**
Damm, Heinz Über glatte einfache Flächen in globaler Auffassung. (Russian, English and French summaries) **(80f:52011)**
Goldberg, Samuel Irving (*with* Vanhecke, Lieven) Two volume decreasing theorems and a new proof of the Hopf conjecture for surfaces of genus zero. **(80b:53031)**
Jongen, H. Th. *See* **Brink-Spalink, J., (80f:58017)**
Mayer, Meinhard Characteristic classes and solutions of gauge theories. **(80c:81069)**
Rączka, Ryszard Nonperturbative construction of nonrenormalizable models of quantum field theory in four-dimensional space-time. **(80k:81117)**
Schoen, Richard M. (*with* Yau, Shing Tung) Incompressible minimal surfaces, three-dimensional manifolds with nonnegative scalar curvature, and the positive mass conjecture in general relativity. **(80e:53045)**
Thibault, Lionel Subdifferentials of compactly Lipschitzian vector-valued functions. **(80c:49010)**
Vanhecke, Lieven *See* **Goldberg, Samuel Irving, (80b:53031)**
Yaffe, Laurence G. Quantizing gauge theories: non-classical field configurations, broken symmetries and gauge copies. **(80b:81061)**
Yau, Shing Tung *See* **Schoen, Richard M., (80e:53045)**

58E17 Pareto optimality, etc., applications to economics

Beauzamy, Bernard Approximation des optima de Pareto. **80j:58029**
Wan, Yieh Hei On the algebraic criteria for local Pareto optima. II. **80a:58018**

Secondary classifications:

Lemaréchal, Claude Optimisation non différentiable: methodes de faisceaux. (English summary) **(80k:65058)**
Schecter, Stephen On the structure of the equilibrium manifold. **(80i:90035)**

58E20 Harmonic maps

do Carmo, Manfredo P. Harmonic mappings. (Portuguese) **80d:58019**
Eells, James Harmonic maps of surfaces. **80d:58020**
Minimal graphs. **80i:58023**
Fuglede, Bent Harmonic morphisms between Riemannian manifolds. (French summary) **80h:58023**
Ishihara, Tôru A mapping of Riemannian manifolds which preserves harmonic functions. **80k:58045**
Jäger, Willi (*with* Kaul, Helmut) Uniqueness and stability of harmonic maps and their Jacobi fields. **80j:58030**
(*with* Kaul, Helmut) Uniqueness of harmonic mappings and of solutions of elliptic equations on Riemannian manifolds. **80d:58021**
Kaul, Helmut *See* **Jäger, Willi, 80d:58021** *and* **Jäger, Willi, 80j:58030**
Lemaire, Luc Applications harmoniques de surfaces riemanniennes. **80h:58024**
Sampson, J. H. Some properties and applications of harmonic mappings. **80b:58031**
Siu, Yum Tong Complex-analyticity of harmonic maps and strong rigidity of compact Kähler manifolds. **80j:58031**
Sunada, Toshikazu Rigidity of certain harmonic mappings. **80f:58021**
Wood, John C. Erratum: "Singularities of harmonic maps and applications of the Gauss-Bonnet formula" [Amer. J. Math. **99** (1977), no. 6, 1329–1344; MR 58 #18539]. **80m:58014**
Yau, Shing Tung Harmonic maps between Riemannian manifolds. **80g:58025**

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Atiyah, Michael Francis (*with* Jones, John D. S.) Topological aspects of Yang-Mills theory. **(80j:58021)**
Barnes, Ted (*with* Ghandour, G. I.) Grassmann functional Schrödinger equation. An application to perturbation theory. **(80a:81008)**
Belavin, A. A. (*with* Zaharov, V. E.) Yang-Mills equations as inverse scattering problem. **(80b:81069)**
Bonora, L. (*with* Pasti, P.; Tonin, M.; Zizzi, P.) Extended Higgs models and 't Hooft algebra. (Italian summary) **(80m:81062)**
Bourguignon, Jean-Pierre (*with* Lawson, H. Blaine, Jr.; Simons, James) Stability and gap phenomena for Yang-Mills fields. **(80h:53028)**
Burns, Dan *See* **Garber, Wolf-Dieter; et al., (80e:81059)**
Carmeli, Moshe Classification of classical Yang-Mills fields. **(80k:81083)**
Cerveró, J. M. Yang-Mills self-dual solutions and a superposition principle. **(80k:81047)**
Christ, Norman H. (*with* Weinberg, Erick J.; Stanton, Nancy K.) General self-dual Yang-Mills solutions. **(80i:81033)**
Corrigan, E. (*with* Goddard, Peter; Templeton, S.) Instanton Green functions and tensor products. **(80b:81041)**
Self-dual solutions to Euclidean Yang-Mills equations. **(80b:81071)**
Ducourtioux, Jean-Louis Temps de vie des solutions de l'équation de la chaleur de Eells-Sampson. (English summary) **(80f:58048)**
Garber, Wolf-Dieter (*with* Ruijsenaars, Simon N. M.; Seiler, Erhard; Burns, Dan) On finite action solutions of the nonlinear σ-model. **(80e:81059)**
Ghandour, G. I. *See* **Barnes, Ted, (80a:81008)**
Goddard, Peter *See* **Corrigan, E.; et al., (80b:81041)**
Goldberg, Samuel Irving (*with* Har'el, Zvi) A general Schwarz lemma for Riemannian-manifolds. **(80c:53055)**
Har'el, Zvi *See* **Goldberg, Samuel Irving, (80c:53055)**
Ioffe, M. S. Some problems of the calculus of variations "in the large" for conformal and quasiconformal imbeddings of Riemann surfaces. (Russian) **(80e:30020)**
Jang, Pong Soo On positivity of mass for black hole space-times. **(80k:83019)**
Jones, John D. S. *See* **Atiyah, Michael Francis, (80j:58021)**
Kitahara, Haruo Sur le second nombre de Betti des variétés kählériennes complètes. (English summary) **(80m:53049)**
Lawson, H. Blaine, Jr. *See* **Bourguignon, Jean-Pierre; et al., (80h:53028)**
Marino, Verita Harmonic maps and tensorial connexions in the sense of Bompiani. (Italian. English summary) **(80f:53025)**
Misner, Charles W. Harmonic maps as models for physical theories. **(80a:81078)**
Namazie, M. A. (*with* Storey, D.) Supersymmetric quantization of linearized supergravity. **(80i:83021)**
Page, Don N. Positive-action conjecture. **(80a:83061)**
Pasti, P. *See* **Bonora, L.; et al., (80m:81062)**
Prat, Jean-Jacques Représentation de certaines fonctions harmoniques bornées sur une surface à courbure négative. (English summary) **(80k:60096)**
Ruijsenaars, Simon N. M. *See* **Garber, Wolf-Dieter; et al., (80e:81059)**
Schoen, Richard M. (*with* Yau, Shing Tung) On the proof of the positive mass conjecture in general relativity. **(80j:83024)**
(*with* Yau, Shing Tung) On the structure of manifolds with positive scalar curvature. **(80k:53064)**
Seiler, Erhard *See* **Garber, Wolf-Dieter; et al., (80e:81059)**
Simons, James *See* **Bourguignon, Jean-Pierre; et al., (80h:53028)**
Siu, Yum Tong (*with* Yau, Shing Tung) Errata to the paper: "Complete Kähler manifolds with nonpositive curvature of faster than quadratic decay" [Ann. of Math. (2)**105** (1977), no. 2, 225–264; MR 55 #10719]. **(80h:32022)**
Stanton, Nancy K. *See* **Christ, Norman H.; et al., (80i:81033)**
Storey, D. *See* **Namazie, M. A., (80i:83021)**
Sun, Ji Guang Harmonic functions on a class of real classical domains. (Chinese) **(80j:31008)**
Tataru-Mihai, P. Classical solutions for the 4-dimensional σ-nonlinear model. (Italian and Russian summaries) **(80h:81045)**
Templeton, S. *See* **Corrigan, E.; et al., (80b:81041)**
Tonin, M. *See* **Bonora, L.; et al., (80m:81062)**
Trautman, Andrzej *The geometry of gauge fields.* **(80k:81111)**
Uhlenbeck, Karen Keskulla Removable singularities in Yang-Mills fields. **(80j:53035)**
Weinberg, Erick J. *See* **Christ, Norman H.; et al., (80i:81033)**
Yau, Shing Tung *See* **Siu, Yum Tong, (80h:32022); Schoen, Richard M., (80j:83024)** *and* **Schoen, Richard M., (80k:53064)**
Zaharov, V. E. *See* **Belavin, A. A., (80b:81069)**
Zizzi, P. *See* **Bonora, L.; et al., (80m:81062)**

58E25 Applications to control theory (optimal and nonoptimal)

Mihalevič, V. M. *See* **Pšeničnyĭ, B. N., 80b:58032**

Pšeničnyĭ, B. N. (*with* Mihalevič, V. M.) An optimal control problem on an abstract manifold. (Russian. English summary) **80b:58032**

Secondary classifications:

Hermann, Robert ★Cartanian geometry, nonlinear waves, and control theory. Part A. **(80e:49028)**

Hirschorn, R. M. Invertibility of nonlinear control systems. **(80c:49020)**

Rettiev, N. S. Some properties of minimal invariant sets of control systems. (Russian) **(80b:49033)**

58E30 Variational principles

Dedecker, Paul Le théorème de Helmholtz-Cartan pour une intégrale simple d'ordre supérieur. (English summary) **80m:58015**

Novotný, Jan On the generally invariant Lagrangians for the metric field and other tensor fields. **80j:58032**

Secondary classifications:

Aldaya, V. (*with* de Azcárraga, J. A.) Fibre bundles and canonical representations of the Poincaré group (class $m \neq 0$) in a Lagrangian formalism. (Italian summary) **(80f:81063)**

Andreo, R. H. (*with* Rohrlich, F.) Longitudinal vibrations of the relativistic string. **(80a:81123)**

de Azcárraga, J. A. *See* **Aldaya, V., (80f:81063)**

Benci, Vieri (*with* Rabinowitz, Paul H.) Critical point theorems for indefinite functionals. **(80i:58019)**

Gu, Chao Hao (*with* Hu, He Sheng; Li, Da Qian; Shen, Chun Li; Xin, Yuan Long; Yang, Chen Ning) Riemannian spaces with local duality and gravitational instantons. **(80a:81085)**

Hu, He Sheng *See* **Gu, Chao Hao; et al., (80a:81085)**

Kobayashi, Masanori *See* **Takahashi, Yasushi, (80b:81062)**

Krupka, Demeter A theory of generally invariant Lagrangians for the metric fields. I. **(80g:58031)**

Mathematical theory of invariant interaction Lagrangians. **(80c:81095)**

Li, Da Qian *See* **Gu, Chao Hao; et al., (80a:81085)**

Martellini, M. (*with* Sodano, P.; Vitiello, G.) Vacuum structure for a quantum field theory in curved space-time. (Italian and Russian summaries) **(80a:81087)**

Palmore, Julian I. Relative equilibria and the virial theorem. **(80i:70014)**

Peton, A. Étude variationnelle des décalages spectraux. (English summary) **(80m:70019a)**

Étude variationnelle des décalages spectraux. II. Aspect relativiste. (English summary) **(80m:70019b)**

Pobožaev, S. I. An approach to nonlinear equations. (Russian) **(80j:47084)**

Rabinowitz, Paul H. *See* **Benci, Vieri, (80i:58019)**

Rohrlich, F. *See* **Andreo, R. H., (80a:81123)**

Rund, Hanno Generalized gauge field theories. **(80f:81072)**

Shen, Chun Li *See* **Gu, Chao Hao; et al., (80a:81085)**

Sodano, P. *See* **Martellini, M.; et al., (80a:81087)**

Takahashi, Yasushi (*with* Kobayashi, Masanori) Origin of the Gribov ambiguity. **(80b:81062)**

Taylor, John G. Towards a geometrization of nature. **(80d:83067)**

Vitiello, G. *See* **Martellini, M.; et al., (80a:81087)**

Xin, Yuan Long *See* **Gu, Chao Hao; et al., (80a:81085)**

Yang, Chen Ning *See* **Gu, Chao Hao; et al., (80a:81085)**

58E35 Variational inequalities (global problems)

58E99 None of the above, but in this section

García, Pedro L. Critical principal connections and gauge-invariance. **80e:58019**

Peetre, Jaak The Euler derivative. An intrinsic approach to the calculus of variations. **80j:58033**

Swanson, R. C. Fredholm intersection theory and elliptic boundary deformation problems. I. **80i:58024a**

Fredholm intersection theory and elliptic boundary deformation problems. II. **80i:58024b**

Secondary classifications:

Barvinskiĭ, A. O. (*with* Ponomarev, V. N.) Global effects of the creation of scalar matter in quantum cosmology. (Russian. English summary) **(80d:83039)**

Baumeister, Richard Generalized Hamilton-Jacobi theories. **(80a:49050)**

Bérard, Pierre H. Spectrum and geometry. (Portuguese) **(80d:58069)**

Knightly, George H. (*with* Sather, D.) Nonlinear buckling and stability of cylindrical panels. **(80d:73072)**

Moore, John Douglas Codimension two submanifolds of positive curvature. **(80a:53063)**

Milicki, Đorđe On the canonical formalism with the derivatives of higher order. **(80d:70035)**

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Ponomarev, V. N. *See* **Barvinskiĭ, A. O., (80d:83039)**

Sather, D. *See* **Knightly, George H., (80d:73072)**

Sternberg, Shlomo Some preliminary remarks on the formal variational calculus of :Gel'fand and Dikiĭ. **(80c:49033)**

Weder, R. A. Instantons and renormalization. **(80i:81039)**

58Fxx Ordinary differential equations on manifolds; dynamical systems (For abstract and topological dynamics, see also 28D10, 34C35, 34C40, 54H20.)

Conley, Charles ★Isolated invariant sets and the Morse index. **80c:58009**

Mohammed, S. E. A. ★Retarded functional differential equations. **80a:58019**

Secondary classifications:

Aris, Rutherford ★Mathematical modelling techniques. **(80b:00008)**

Arnol'd, V. I. ★Дополнительные главы теории обыкновенных дифференциальных уравнений. (Russian) [Supplementary chapters to the theory of ordinary differential equations] **(80i:34001)**

★Математические методы классической механики. (Russian) [Mathematical methods of classical mechanics] **(80h:70001)**

(Bullard, Edward) *See* **Topics in nonlinear dynamics, (80b:70002)**

Harlamov, M. P. Some applications of differential geometry in the theory of mechanical systems. (Russian) **(80h:70014)**

(Jorna, Siebe) *See* **Topics in nonlinear dynamics, (80b:70002)**

(Munk, W. H.) *See* **Topics in nonlinear dynamics, (80b:70002)**

Percival, Ian C. A variational principle for invariant tori of fixed frequency. **(80c:70021)**

Thirring, Walter ★Lehrbuch der mathematischen Physik. Band 1. **(80f:70012)**

La Jolla, Calif. *See* **Topics in nonlinear dynamics, (80b:70002)**

Nonlinear dynamics *See* **Topics in nonlinear dynamics, (80b:70002)**

Topics in nonlinear dynamics ★Topics in nonlinear dynamics. **(80b:70002)**

Workshop:

Nonlinear Dynamics *See* **Topics in nonlinear dynamics, (80b:70002)**

58F05 Hamiltonian and Lagrangian systems; symplectic geometry

Andreassi, Gabriele Generalized groups of functions. (Italian. English summary) **80h:58025**

Antonov, V. A. (*with* Sažin, A. I.; Sokolov, L. L.; Holševnikov, K. V.) On the instability of Hamiltonian systems. **80d:58022**

Arnal, Didier (*with* Cortet, Jean-Claude) Geometrical theory of contractions of groups and representations. **80j:58034**

Burdet, G. (*with* Perrin, M.; Perroud, M.) Generating functions for the affine symplectic group. **80d:58023**

Case, K. M. Integration of linearized evolution equations. **80g:58026**

Chen, Xiang Yan The topology of manifold M_8 of the general three-body problem. **80d:58024**

Churchill, R. C. (*with* Pecelli, G.; Rod, D. L.) A survey of the Hénon-Heiles Hamiltonian with applications to related examples. **80h:58046**

Clarke, Frank H. Solution périodique des équations hamiltoniennes. (English summary) **80b:58033**

Cortet, Jean-Claude *See* **Arnal, Didier, 80j:58034**

Cushman, Richard The relationship between the index of a strongly stable periodic linear Hamiltonian vectorfield and the index of its stability domain. **80g:58027**

Corrections to: "The relationship between the index of a strongly stable periodic linear Hamiltonian vectorfield and the index of its stability domain" [Duke Math. J. 45 (1978), no. 4, 701–709; MR 80g:58027]. **80h:58047**

Dao Čong Thi The integrability of the Euler equations on homogeneous symplectic manifolds. (Russian) **80d:58025**

Devaney, Robert L. Transverse heteroclinic orbits in the anisotropic Kepler problem. **80g:58028**

Easton, Robert W. Homoclinic phenomena in Hamiltonian systems with several degrees of freedom. **80d:58026**

Ekeland, Ivar (*with* Lasry, Jean Michel) Nombre de solutions périodiques des équations de Hamilton. (English summary) **80b:58034**

El Mabsout, B. Espace des phases dans le problème plan des trois corps. (English summary) **80e:58020**

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Ohkawa, Fuyayoshi J. Orthogonality catastrophe due to local electron interaction. **(80a:81096)**

Patissier, Guy Déformations différentielles à coefficients constants. (English summary) **(80l:58048)**

Radhakrishna, L. (*with* Bhosale, D. R.) On the Fermi propagation and Lie propagation of tensors in general relativity. **(80a:83047)**

Rawnsley, J. H. Flat partial connections and holomorphic structures in C^∞ vector bundles. **(80g:58007)**

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Šereševskiĭ, I. A. Quantization in cotangent bundles. (Russian) **(80h:58009)**

Sherry, T. N. (*with* Sudarshan, E. C. G.) Interaction between classical and quantum systems: a new approach to quantum measurement. I. **(80b:81054)**

Simms, D. J. On the Schrödinger equation given by geometric quantisation. **(80e:81013)**

Smith, T. B. Semiclassical approximation in the Weyl picture by path summation. **(80h:81042)**

Śniatycki, Jędrzej On Hamiltonian dynamics of particles with gauge degrees of freedom. **(80k:81017)**

Sternberg, Shlomo On the role of field theories in our physical conception of geometry. **(80g:81001)**

Sudarshan, E. C. G. *See* **Sherry, T. N., (80b:81054)**

Sutherland, Bill A brief history of the quantum soliton with new results on the quantization of the Toda lattice. **(80k:81037)**

Tabor, Michael The role of periodic orbits in semiclassical quantization. **(80k:81059)**

(Takesugi, Eiichi) *See* **Group theoretical methods in physics, (80l:81002)**

Thacker, H. B. *See* **Bergknoff, H., (80k:81121)**

Timofeevskaja, O. D. Taking into account the relative group motion in the charged scalar theory with two sources. (Russian. English summary) **(80b:81120)**

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Zlatev, I. S. Dynamic equations for quasiprobability distributions in quantum mechanics. **(80l:81011)**

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Group Theoretical Methods in Physics *See* **Group theoretical methods in physics, (80l:81002)**

Group Theory *See* **Group theoretical methods in physics, (80l:81002)**

Conference:

Group Theory and Mathematical Physics *See* **Group theoretical methods in physics, (80l:81002)**

Group theoretical methods in physics ★Group theoretical methods in physics. **(80l:81002)**

Mathematical physics *See* **Group theoretical methods in physics, (80l:81002)**

58F07 Completely integrable systems (including systems with an infinite number of degrees of freedom)

Abellanas, L. (*with* Galindo, A.) A generalized variational algebra and conserved densities for linear evolution equations. **80g:58035b**

Adler, M. On a trace functional for formal pseudo differential operators and the symplectic structure of the Korteweg-de Vries type equations. **80l:58026**

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Airault, H. Poles of nonlinear evolution equations and integrable dynamical systems. **80m:58022**

Arhangel'skiĭ, A. A. Completely integrable Hamiltonian systems on the group of triangular matrices. (Russian) **80h:58033**

Bullough, R. K. (*with* Dodd, R. K.) Solitons in mathematics: brief history. **80h:58034**

Calogero, F. Motion of poles and zeros of special solutions of nonlinear and linear partial differential equations and related "solvable" many-body problems. (Italian and Russian summaries) **80a:58023**

Dikiĭ, L. A. *See* **Gel'fand, I. M., 80l:58027**

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Galindo, A. (*with* Martínez Alonso, L.) Kernels and ranges in the variational formalism. **80g:58035a**

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Kričever, I. M. Algebraic curves and nonlinear difference equations. (Russian) **80k:58055**

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McKean, H. P. Boussinesq's equation as a Hamiltonian system. **80k:58056**

van Moerbeke, Pierre (*with* Mumford, David) The spectrum of difference operators and algebraic curves. **80e:58028**

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Newell, Alan C. The general structure of integrable evolution equations. **80k:58057**

Ol'šaneckiĭ, M. A. (*with* Rogov, V.-B. K.) Bound states in completely integrable systems with two types of particles. **80e:58029**

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Kac, Mark Nonlinear dynamics and inverse problems. **(80e:82037)**
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(*with* Newell, Alan C.) Evolution equations, singular dispersion relations, and moving eigenvalues. **(80i:35159)**
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Kulish, P. P. (*with* Reĭman, A. G.) The hierarchy of symplectic forms for the Schrödinger equation and for the Dirac equation. (Russian) **(80e:81036)**
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Lee, Y. C. *See* **Chen, H. H.; et al., (80b:76042)**
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Manin, Ju. I. Matrix solitons and vector bundles over curves with singularities. (Russian) **(80g:35114)**
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Newell, Alan C. *See* **Kaup, David J., (80b:35124)** *and* **Kaup, David J., (80i:35159)**
Novikov, S. P. *See* **Krichever, I. M., (80i:35162)**
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Evolution equations and curvature forms. II. Equations of the Korteweg-de Vries type. **(80j:58003b)**
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Saunders, R. *See* **Bullough, R. K.; et al., (80k:81202)**
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Tasso, H. *See* **Caldas, I. L., (80h:70017)**
Tenenblat, Keti (*with* Terng, Chuu Lian) A higher dimension generalization of the sine-Gordon equation and its Bäcklund transformation. **(80b:35129)**
Terng, Chuu Lian *See* **Tenenblat, Keti, (80b:35129)**
Thirring, Walter *See* **Breitenecker, M., (80h:70021)**
Trubowitz, E. *See* **Delft, P., (80e:34011)**
Wojciechowski, S. Completely integrable systems of N particles in one dimension. **(80a:34053)**
Zaharov, V. E. *See* **Belavin, A. A., (80b:81069)**

58F09 Morse-Smale systems

Batterson, Steve The dynamics of Morse-Smale diffeomorphisms on the torus. **80j:58041**
Camacho, Maria Izabel Tavares Generic properties of homogeneous vector fields of degree two in R^3. **80k:58060**
Chicone, Carmen C. Quadratic gradients on the plane are generically Morse-Smale. **80g:58036**
Fel'štyn, A. L. The structure of phase diagrams of three-dimensional systems of Morse-Smale type. (Russian) **80j:58042**
Morse-Smale systems on a three-dimensional sphere. (Russian. English summary) **80k:58061**
Franks, John M. The periodic structure of nonsingular Morse-Smale flows. **80k:58062**
Morse-Smale flows and homotopy theory. **80k:58063**
Halpern, Benjamin Morse-Smale diffeomorphisms on tori. **80k:58064**
Matsumoto, Shigenori There are two isotopic Morse-Smale diffeomorphisms which cannot be joined by simple arcs. **80d:58033**
Morgan, John W. Nonsingular Morse-Smale flows on 3-dimensional manifolds. **80j:58043**
Narasimhan, Carolyn C. The periodic behavior of Morse-Smale diffeomorphisms on compact surfaces. **80g:58037**
Piljugin, S. Ju. (*with* Pliss, V. A.) The boundary of a stable invariant set of the Morse-Smale system. (Russian) **80j:58044**
Pliss, V. A. *See* **Piljugin, S. Ju., 80j:58044**
dos Reis, Genésio Lima Structural stability of equivariant vector fields. **80c:58012**
da Rocha, Luiz Fernando Characterization of Morse-Smale isotopy classes on two-manifolds. **80h:58035**

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Antonevič, A. B. Operators that are generated by linear extensions of diffeomorphisms. (Russian) **(80a:58027)**
Fedotov, A. G. An estimate for the number of invariant tori of a dynamical system on a manifold with a boundary. (Russian) **(80m:58034)**
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Gutiérrez, Carlos Structural stability for flows on the torus with a cross-cap. **(80k:58065)**
Mendes, Pedro Stability in open manifolds. Anosov systems. (Portuguese) **(80d:58035)**
Narasimhan, Carolyn C. *See* **Franks, John M., (80a:58028)**

58F10 Stability theory

Bothe, H. G. A modification of the Kupka-Smale theorem and smooth invariant manifolds of dynamical systems. **80i:58029**
Bronštein, I. U. (*with* Glavan, V. A.) The Grobman-Hartman theorem for extensions of dynamical systems. (Russian) **80a:58024**
Bylov, B. F. (*with* Vinograd, R. È.; Lin, V. Ja.; Lokucievskiĭ, O. V.) Topological causes of the anomalous behavior of some almost periodic systems. (Russian) **80d:58034**
Camacho, César (*with* Kuiper, Nicolaas H.; Palis, Jacob) The topology of holomorphic flows with singularity. **80j:58045**
Conley, Charles (*with* Smoller, Joel) Isolated invariant sets of parameterized systems of differential equations. **80f:58023**
Franks, John M. The structure of Smale diffeomorphisms. **80e:58030**
Glavan, V. A. *See* **Bronštein, I. U., 80a:58024**
Griffiths, H. B. Structural stability of planar potentials. **80g:58038**
Grüsum, H.-R. The stability theorem of Moser et al. **80c:58013**
Gutiérrez, Carlos Structural stability for flows on the torus with a cross-cap. **80k:58065**
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Kirchgraber, Urs Sur les propriétés géométriques au voisinage d'une variété invariante. (English summary) **80k:58067**
Kuiper, Nicolaas H. *See* **Camacho, César; et al., 80j:58045**
Lam, Ping Fun Embedding a differentiable homeomorphism in a flow subject to a regularity condition on the derivatives of the positive transition homeomorphisms. **80a:58025**
Lin, V. Ja. *See* **Bylov, B. F.; et al., 80d:58034**
Lokucievskiĭ, O. V. *See* **Bylov, B. F.; et al., 80d:58034**
Lopes, Artur Oscar Structural stability and hyperbolic attractors. **80j:58046**
Malta, I. P. Hyperbolic Birkhoff centers. **80j:58047**
Malyšev, Ju. V. Stability and topological classification of invariant sets. (Russian) **80f:58024**
Mather, John N. Area preserving twist homeomorphism of the annulus. **80k:58068**
Mendes, Pedro Stability in open manifolds. Anosov systems. (Portuguese) **80d:58035**
Montgomery, John T. On the homotopy index of Conley. **80e:58031**
Nitecki, Zbigniew On the topology of the set of completely unstable flows. **80j:58048**
Osipenko, G. S. Dynamic equivalence near invariant manifolds. (Russian) **80b:58039**
Palis, Jacob Rigidity of the centralizers of diffeomorphisms and structural stability of suspended foliations. **80b:58040**

Dynamical systems. (Portuguese) **80d:58036**
See also **Camacho, César; et al., 80j:58045**

Pliĭugin, S. Ju. Phase diagrams of Morse-Smale systems without critical connections. (Russian. English summary) **80d:58037**
Simple connectedness with preservation of the phase diagram. (Russian) **80b:58036**

Pliĭugina, V. B. Behavior of trajectories on the center manifold of a system with one zero root. (Russian) **80k:58069**

Sasaki, Takeshi Some examples of stochastically stable homeomorphisms. **80c:58014**

Shub, Michael ★Stabilité globale des systèmes dynamiques. **80c:58015**

Smoller, Joel *See* **Conley, Charles, 80f:58023**

van Strien, Sebastian J. Center manifolds are not C^∞. **80j:58049**

Teixeira, Marco Antonio On structural stability of pairings of vector fields and functions. **80m:58023**

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Structural stability theorems for integrable differential forms on 3-manifolds. **(80b:58063)**

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Dai, Lo Sheng On the existence, uniqueness, and global asymptotic stability of the periodic solution of the modified Michaelis Menten mechanism. **(80c:34039)**

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Diamond, Phil Discrete Liapunov functions with $\Delta^2 V > 0$. **(80d:39001)**

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Johnson, Russell A. On a theorem of Sell. **(80g:34043)**

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Langevin, Rémi (*with* Rosenberg, Harold) Integrable perturbations of fibrations and a theorem of Seifert. **(80d:57013)**

Laughaar, Henry L. Geometry and stability theory. (French summary) **(80e:70020)**

Lukackiĭ, A. M. Curvature of a group of diffeomorphisms that preserve the measure of a two-dimensional sphere. (Russian) **(80b:58017)**
The system of generators of the group of diffeomorphisms of an n-dimensional torus. (Russian) **(80k:58030)**

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Mañé, Ricardo Orbits of paths under hyperbolic toral automorphisms. **(80d:58053)**

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58F11 Ergodic theory; invariant measures [See also 28Dxx.]

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Pianigiani, Giulio (*with* Yorke, James A.) Expanding maps on sets which are almost invariant. Decay and chaos. **80i:58030**

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58F12 Structure of attractors (and repellors)

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58F13 Strange attractors; chaos and other pathologies

Clerc, René-Louis (*with* Hartmann, Christian) Quelques propriétés de certaines singularités unidimensionnelles d'une récurrence autonome du second ordre. (English summary) **80j:58053**

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Hamiltonian systems *See* **Stochastic behavior in classical and quantum Hamiltonian systems, (80k:70004)**

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58F14 Bifurcation theory and singularities

Berezovskaja, F. S. Topological normal form of a system of two differential equations. (Russian) **80k:58039**

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Thomas, E. S. *See* **Pecelli, G.**, (80k:34053)
Wan, Henry Y., Jr. Discussion paper. (80m:90038)
Westreich, David *See* **Podolak, E.**, (80k:34059)
Yorke, James A. *See* **Alexander, J. C.**, (80i:58013)

58F15 Hyperbolic structures (expanding maps, Anosov systems, etc.)

Antonevič, A. B. Operators that are generated by linear extensions of diffeomorphisms. (Russian) 80a:58027
Bowen, Rufus Entropy and the fundamental group. 80d:58049
Bronštein, I. U. (*with* Glavan, V. A.) Hyperbolic sets of smooth extensions of dynamical systems. (Russian) 80k:58081
Chicone, Carmen C. *See* **Swanson, R. C.**, 80f:58038
Curry, James H. (*with* Yorke, James A.) A transition from Hopf bifurcation to chaos: computer experiments with maps on $\mathbf{R}^2$. 80d:58050
Dani, S. G. Nilmanifolds with Anosov automorphism. 80k:58082
Devaney, Robert L. (*with* Nitecki, Zbigniew) Shift automorphisms in the Hénon mapping. 80f:58035
Easton, Robert W. (*with* McGehee, Richard) Homoclinic phenomena for orbits doubly asymptotic to an invariant three-sphere. 80c:58017
Farrell, F. T. (*with* Jones, Lowell) Markov cell structures for expanding maps in dimension two. 80k:58083
Franke, John E. (*with* Selgrade, James F.) Hyperbolicity and cycles. 80b:58047
Furuike, Tokihiko On the connection between Anosov diffeomorphisms and Axiom A. (Japanese) 80c:58018
Glavan, V. A. *See* **Bronštein, I. U.**, 80k:58081
Green, Leon W. Remarks on uniformly expanding horocycle parameterizations. 80g:58040
Hancock, S. G. Construction of invariant sets for Anosov diffeomorphisms. 80f:58036
Hastings, Harold M. On expansive homeomorphisms of the infinite torus. 80d:58051
Huang, Yün Ming Stability and normal hyperbolicity of ω-linear vector fields on manifolds. 80a:58022
Jones, Lowell *See* **Farrell, F. T.**, 80k:58083
Kurata, Masahiro Hyperbolic nonwandering sets without dense periodic points. 80d:58052
Markov partitions of hyperbolic sets. 80f:58037
Hyperbolic nonwandering sets without dense periodic points. 80h:58041
Lerman, L. M. *See* **Vainštein, A. G.**, 80b:58049
Mañé, Ricardo Persistent manifolds are normally hyperbolic. 80c:58019
Orbits of paths under hyperbolic toral automorphisms. 80d:58053
Expansive homeomorphisms and topological dimension. 80i:58032
McGehee, Richard *See* **Easton, Robert W.**, 80c:58017
Murdock, J. A. Qualitative dynamics from asymptotic expansions. 80g:58041
Neimark, Ju. I. Invariant manifolds and stochastic motion of dynamical systems. (Russian) 80d:58054
Nitecki, Zbigniew *See* **Devaney, Robert L.**, 80f:58035
Oka, Masatoshi On stabilities of expanding endomorphisms of compact manifolds. 80c:58020
Ratner, Marina Horocycle flows are loosely Bernoulli. 80b:58048
Ruelle, David Analycity properties of the characteristic exponents of random matrix products. 80e:58035
Selgrade, James F. *See* **Franke, John E.**, 80b:58047
Swanson, R. C. (*with* Chicone, Carmen C.) Anosov does not imply infinitesimally ergodic. 80f:58038
Vainštein, A. G. (*with* Lerman, L. M.) Uniform structures and the equivalence of diffeomorphisms. (Russian) 80b:58049
Walters, Peter On the pseudo-orbit tracing property and its relationship to stability. 80d:58055
Yorke, James A. *See* **Curry, James H.**, 80d:58050

Secondary classifications:

Bartlett, James H. Errata: "Instability of an area-preserving polynomial mapping" (Celestial Mech. 17 (1978), no. 1, 3–36). (80a:34051b)
Bouc, R. (*with* Defilippi, M.; Iooss, Gérard) On a problem of forced nonlinear oscillations. Numerical example of bifurcation into an invariant torus. (80a:34039)
Cleave, John P. Generic bifurcations of forced oscillations of integrable mechanical systems. (80b:34048)
Dani, S. G. Sequential entropy of generalised horocycles. (80e:22013)
On invariant measures, minimal sets and a lemma of Margulis. (80d:58039)
Defilippi, M. *See* **Bouc, R.; et al.**, (80a:34039)

Esch, Gérard G. Phase transitions, approach to equilibrium, and structural stability. **(80i:82021)**
Góra, Paweł On small stochastic perturbations of the one-sided subshift of finite type. (Russian summary) **(80h:28024)**
Grines, V. Z. (*with* Žužoma, E. V.) Topological classification of orientable attractors on an n-dimensional torus. (Russian) **(80k:58071)**
Hale, Jack K. (*with* Táboas, Plácido) Interaction of damping and forcing in a second order equation. **(80b:34041)**
Ioos, Gérard *See* **Bouc, R.; et al., (80a:34039)**
Jacobs, Konrad Stochastics and mechanics. **(80k:70014)**
Johnson, Russell A. Concerning a theorem of Sell. **(80b:34058)**
Kamaev, D. A. *See* **Plykin, R. V.; et al., (80k:58072)**
Kaplan, James L. (*with* Yorke, James A.) Preturbulence: a regime observed in a fluid flow model of Lorenz. **(80f:58028)**
Kreĭnovič, V. Ja. *See* **Sine, Robert, (80k:28021)**
Lind, D. A. Ergodic group automorphisms and specification. **(80j:28024)**
Mendes, Pedro Stability in open manifolds. Anosov systems. (Portuguese) **(80d:58035)**
Misra, B. Nonequilibrium entropy, Lyapounov variables, and ergodic properties of classical systems. **(80k:82045)**
Nagashima, Tomomasa *See* **Shimada, Ippei, (80k:58077)**
Palis, Jacob Rigidity of the centralizers of diffeomorphisms and structural stability of suspended foliations. **(80b:58040)**
Pesin, Ja. B. Formulas for the entropy of the geodesic flow on a compact Riemannian manifold without conjugate points. (Russian) **(80j:58059)**
Plykin, R. V. (*with* Kamaev, D. A.; Zirov, A. Ju.) One-dimensional attractors of A-diffeomorphisms on S^3 and diffeomorphisms with infinitely many sinks. **(80k:58072)**
Rabinovič, M. I. Stochastic self-oscillations and turbulence. **(80k:58076)**
Ratner, Marina Bernoulli flow over maps of the interval. **(80b:28026)**
Shimada, Ippei (*with* Nagashima, Tomomasa) A numerical approach to ergodic problem of dissipative dynamical systems. **(80k:58077)**
Sine, Robert (*with* Kreĭnovič, V. Ja.) Remarks on billiards. **(80k:28021)**
Táboas, Plácido *See* **Hale, Jack K., (80b:34041)**
Yorke, James A. *See* **Kaplan, James L., (80f:58028)**
Zirov, A. Ju. *See* **Plykin, R. V.; et al., (80k:58072)**
Žužoma, E. V. *See* **Grines, V. Z., (80k:58071)**

58F17 Geodesic flows

Bolton, John Conditions under which a geodesic flow is Anosov. **80g:58042**
Grjuntal', A. I. The existence of convex spherical metrics all of whose closed nonselfintersecting geodesics are hyperbolic. (Russian) **80h:58042**
Hartman, Philip Linear second-order systems of ordinary differential equations and geodesic flows. **80i:58033**
Pesin, Ja. B. Formulas for the entropy of the geodesic flow on a compact Riemannian manifold without conjugate points. (Russian) **80j:58059**
Thiem, Anton Integrabilität beim geodätischen Fluß. **80j:58060b**
Beiträge:
Differentialgeometrie ★Beiträge zur Differentialgeometrie, Heft 2. **80j:58060a**
Differential geometry *See* **Beiträge: Differentialgeometrie, 80j:58060a**

Secondary classifications:

Aleksandrov, A. N. (*with* Piragas, K. A.) Geodesic structure. I. Reciprocal dynamics of geodesics. (Russian. English summary) **(80d:83019)**
Baĭkov, V. I. (*with* Matveev, G. G.) Shear-free motions in a gravitational field. (Russian) **(80d:83049)**
Green, Leon W. Remarks on uniformly expanding horocycle parameterizations. **(80g:58040)**
Matveev, G. G. *See* **Baĭkov, V. I., (80d:83049)**
Ne'eman, Yuval Gravity is the gauge theory of the parallel-transport modification of the Poincaré group. **(80d:83087)**
Piragas, K. A. *See* **Aleksandrov, A. N., (80d:83019)**
Piragas, L. E. Nonlinear effects in the relative dynamics of test bodies in general relativity. I. The second approximation for unperturbed systems. (Russian) **(80f:83012a)**
Nonlinear effects in the relative dynamics of test bodies in general relativity. II. The influence of small perturbing forces. (Russian) **(80f:83012b)**

58F18 Relations with foliations

Thom, René Limit sets of leaves of analytic foliations. (Japanese) **80m:58030**

Secondary classifications:

Bouma, L. G. (*with* van Est, W. T.) Manifold schemes and foliations on the 2-torus and the Klein bottle. I, II, III. **(80j:57024)**
Camacho, César Foliations with singularities and group actions. (Portuguese) **(80e:58003)**
(*with* Kuiper, Nicolaas H.; Palis, Jacob) The topology of holomorphic flows with singularity. **(80j:58045)**
Epstein, D. B. A. (*with* Vogt, E.) A counterexample to the periodic orbit conjecture in codimension 3. **(80c:57014)**
van Est, W. T. *See* **Bouma, L. G., (80j:57024)**
Kuiper, Nicolaas H. *See* **Camacho, César; et al., (80j:58045)**
Langevin, Rémi (*with* Rosenberg, Harold) Integrable perturbations of fibrations and a theorem of Seifert. **(80d:57013)**
Ngô van Quê Formes singulières génériques. **(80k:58002)**
Palis, Jacob *See* **Camacho, César; et al., (80j:58045)**
Rosenberg, Harold *See* **Langevin, Rémi, (80d:57013)**
Vogt, E. *See* **Epstein, D. B. A., (80c:57014)**

58F19 Eigenvalue and spectral problems

Dokken, Douglas A note on a distallity theorem of C. C. Moore. **80f:58039**

Secondary classifications:

Hassard, Brian The numerical evaluation of Hopf bifurcation formulae. **(80j:58057)**

58F20 Periodic points and zeta functions

Batterson, Steve Periodic points and Lefschetz numbers. **80e:58036**
Block, Louis Simple periodic orbits of mappings of the initial. **80m:58031**
Franks, John M. (*with* Narasimhan, Carolyn C.) The periodic behavior of Morse-Smale diffeomorphisms. **80a:58028**
Jonker, Leo (*with* Rand, David) The nonwandering set of unimodal maps of the unit interval. **80c:58037**
(*with* Rand, David) Bifurcations of unimodal maps of the unit interval. **80i:58034**
Narasimhan, Carolyn C. *See* **Franks, John M., 80a:58028**
Piljugin, S. Ju. The number of periodic points of a diffeomorphism. (Russian) **80g:58043**
Rand, David *See* **Jonker, Leo, 80e:58037** *and* **Jonker, Leo, 80i:58034**
Sacksteder, Richard (*with* Shub, Michael) Entropy of a differentiable map. **80c:58021**
Shub, Michael *See* **Sacksteder, Richard, 80c:58021**
Straffin, Philip D., Jr. Periodic points of continuous functions. **80h:58043**
Young, Lai Sang A closing lemma on the interval. **80k:58084**

Secondary classifications:

Batterson, Steve The dynamics of Morse-Smale diffeomorphisms on the torus. **(80j:58041)**
Krieger, Wolfgang On the periodic points of topological Markov chains. **(80j:54036)**
Mayer, D. H. On Ruelle's ζ-function for exponentially decreasing potentials. **(80j:82026)**
Narasimhan, Carolyn C. The periodic behavior of Morse-Smale diffeomorphisms on compact surfaces. **(80g:58037)**
Piljugin, S. Ju. (*with* Pliss, V. A.) The boundary of a stable invariant set of the Morse-Smale system. (Russian) **(80j:58044)**
Pliss, V. A. *See* **Piljugin, S. Ju., (80j:58044)**
Rimmer, Russell Symmetry and bifurcation of fixed points of area preserving maps. **(80g:58039)**
Shub, Michael ★Stabilité globale des systèmes dynamiques. **(80c:58015)**
Šilhavý, Miroslav A condition equivalent to the existence of non-equilibrium entropy and temperature for materials with internal variables. **(80b:82037)**

58F21 Limit cycles, etc.

Callot, Jean-Louis (*with* Diener, Francine; Diener, Marc) Le problème de la "chasse au canard". (English summary) **80b:58050**
Diener, Francine *See* **Callot, Jean-Louis; et al., 80b:58050**
Diener, Marc *See* **Callot, Jean-Louis; et al., 80b:58050**

Secondary classifications:

Date, Tsutomu Classification and analysis of two-dimensional real homogeneous quadratic differential equation systems. **(80f:34038)**
Hassard, Brian The numerical evaluation of Hopf bifurcation formulae. **(80j:58057)**
Itô, Akira Successive subharmonic bifurcations and chaos in a nonlinear Mathieu equation. **(80f:34036)**
A perturbation theory of a quasiperiodic motion. An asymptotic expansion method. **(80j:34045)**
Kaplan, Wilfred On the trajectories of a quadratic differential. I. **(80h:30041)**
Osawa, Takeo *See* **Sawada, Katuro, (80f:34027)**
Sawada, Katuro (*with* Osawa, Takeo) On exactly soluble nonlinear ordinary differential equations of the Liénard type. **(80f:34027)**
Shimizu, T. Analytic form of the simplest limit cycle in the Lorenz model. **(80j:58054)**
Stoljarov, V. V. The study of dynamical systems that have a given particular integral. (Russian) **(80c:34027)**
Vigfusson, J. O. On Poincaré cycles of the linear chain of oscillators. **(80f:70021)**

58F22 Periodic solutions

Erle, Dieter Stable closed orbits in plane autonomous dynamical systems. **80d:58056**

Secondary classifications:

Angelstorf, N. Global branching and multiplicity results for periodic solutions of functional differential equations. **(80f:34119)**
Batterson, Steve The dynamics of Morse-Smale diffeomorphisms on the torus. **(80j:58041)**
Benci, Vieri (*with* Rabinowitz, Paul H.) Critical point theorems for indefinite functionals. **(80i:58019)**
Eeckhout, Linda *See* **Verbeest, Frank, (80j:76010)**
Epstein, D. B. A. (*with* Vogt, E.) A counterexample to the periodic orbit conjecture in codimension 3. **(80c:57014)**
Lochak, Georges Sur une extension du théorème de Floquet à des systèmes dynamiques non linéaires dérivant d'un hamiltonien périodique par rapport au temps. (English summary) **(80i:34069)**
Martins, Roberto Vieira Sur la classification des orbites périodiques instables d'après Poincaré. (English summary) **(80b:70035)**
Pecelli, G. (*with* Thomas, E. S.) Normal modes, uncoupling, and stability for a class of nonlinear oscillators. **(80k:34053)**

Podolak, E. (*with* Westreich, David) Systems of first order differential equations with global periodic solutions. **(80k:34059)**
Rabinowitz, Paul H. A variational method for finding periodic solutions of differential equations. **(80b:34043)**
See also **Benci, Vieri, (80i:58019)**
Schmitt, Klaus Periodic solutions of delay-differential equations. **(80m:34072)**
Shimizu, T. Analytic form of the simplest limit cycle in the Lorenz model. **(80j:58054)**
Smith, Russell A. The Poincaré-Bendixson theorem for certain differential equations of higher order. **(80i:34064)**
Thomas, E. S. *See* **Pecelli, G., (80k:34053)**
Verheest, Frank (*with* Eeckhout, Linda) Aspects of nonresonant mode coupling in third order. **(80j:76010)**
Vogt, E. *See* **Epstein, D. B. A., (80c:57014)**
Westreich, David *See* **Podolak, E., (80k:34059)**

58F25 Flows

Alexeeman, Michael A sufficient condition for the avoidance of sets by measure preserving flows in $\mathbb{R}^n$. **80e:58038**
Bogdanov, R. I. The degree of degeneracy of a singular point of a vector field on the plane. (Russian) **80d:58057**
Gutiérrez, Carlos On two-dimensional recurrence. **80k:58085**
Ishii, Ippei On the first cohomology group of a minimal set. **80b:58051**
Marchetto, D. Stepanoff flows on orientable surfaces. **80d:58058**

Secondary classifications:

Ahmad, Shair (*with* Sarabia, José) On nonwandering continuous flows. **(80m:54054)**
Chaperon, Marc Linéarisation C^∞ des germes d'actions C^∞ de $\mathbb{Z}^k \times \mathbb{R}^m$. (English summary) **(80m:58027)**
Epstein, D. B. A. (*with* Vogt, E.) A counterexample to the periodic orbit conjecture in codimension 3. **(80c:57014)**
Gallun, I. V. The total derivative equations with periodic coefficients. (Russian. English summary) **(80j:34078)**
Ishii, Ippei On minimal flows. **(80g:54046a)**
On minimal flows. II. **(80g:54046b)**
Sacksteder, Richard (*with* Shub, Michael) Entropy on sphere bundles. **(80e:58032)**
Sarabia, José *See* **Ahmad, Shair, (80m:54054)**
Shub, Michael *See* **Sacksteder, Richard, (80e:58032)**
Thom, René Gradients of analytic functions. **(80k:58025)**
Vogt, E. *See* **Epstein, D. B. A., (80c:57014)**

58F27 Quasiperiodic flows

Secondary classifications:

Channell, Paul J. An illustrative example of the Chirikov criterion for stochastic instability. **(80g:70006)**
Mrozek, M. Inverse limits of torus-groups and minimal sets of some almost periodic continuous flows. **(80g:54049)**
Vujičić, Veljko A. Quasilinear oscillations of mechanical systems. (Russian. English and Serbo-Croatian summaries) **(80e:70031)**

58F30 Perturbations

Fenichel, Neil Geometric singular perturbation theory for ordinary differential equations. **80m:58032**
Gutiérrez, Carlos Smooth nonorientable nontrivial recurrence on two-manifolds. **80d:58059**
Kaplan, James L. (*with* Yorke, James A.) Nonassociative, real algebras and quadratic differential equations. **80d:58060**
Oliva, W. M. Some open questions in the geometric theory of retarded functional differential equations. **80f:58040**
Robinson, R. Clark Introduction to the closing lemma. **80d:58061**
Spirig, F. Algebraic aspects of perturbation theories. **80m:58033**
Yorke, James A. *See* **Kaplan, James L., 80d:58060**

Secondary classifications:

Bronštein, I. U. (*with* Černiĭ, V. F.) Linear extensions that satisfy the Perron condition. I. (Russian) **(80c:54046)**
Casati, Giulio (*with* Čirikov, Boris V.; Izrailev, F. M.; Ford, Joseph) Stochastic behavior of a quantum pendulum under a periodic perturbation. **(80k:81013)**
Černiĭ, V. F. *See* **Bronštein, I. U., (80c:54046)**
Čirikov, Boris V. *See* **Casati, Giulio; et al., (80k:81013)**
Ford, Joseph *See* **Casati, Giulio; et al., (80k:81013)**
Góra, Paweł On small stochastic perturbations of the one-sided subshift of finite type. (Russian summary) **(80b:28024)**
Gutiérrez, Carlos On two-dimensional recurrence. **(80k:58085)**
Gutzwiller, Martin C. Path integrals and the relation between classical and quantum mechanics. **(80k:81041)**
Classical quantization conditions for a dynamical system with stochastic behavior? **(80k:81053)**
Haviland, Robert A., Jr. An improved transformation-elimination technique for the solution of perturbed Hamiltonian systems. **(80i:70012)**
Izrailev, F. M. *See* **Casati, Giulio; et al., (80k:81013)**
Pecelli, G. (*with* Thomas, E. S.) Normal modes, uncoupling, and stability for a class of nonlinear oscillators. **(80k:34053)**
Ščerbina, E. S. On the general theory of the vibroprotection of dynamical systems. (Russian. English summary) **(80i:34070)**
Thomas, E. S. *See* **Pecelli, G., (80k:34053)**

58F35 Invariance properties

Fedotov, A. G. An estimate for the number of invariant tori of a dynamical system on a manifold with a boundary. (Russian) **80m:58034**
González-Gascón, F. Reduction of vector fields to Newton-like vector fields. **80g:58044**
Geometrical obtention and generalization of recent results concerning symmetries and first integrals. **80m:58035**
Lankerovič, M. Ja. Ordinary differential equations admitting a group of maximal dimension. (Russian) **80e:58039**
Posluszny, Jeffrey (*with* Rubel, Lee A.) The motions of an ordinary differential equation. **80m:58036**
Rubel, Lee A. *See* **Posluszny, Jeffrey, 80m:58036**
Svanidze, N. V. Existence of invariant tori for a three-dimensional billiard, which are concentrated in the vicinity of a "closed geodesic on the boundary region". (Russian) **80k:58086**

Secondary classifications:

Baumgarte, Joachim Die Invarianzgruppe des Oszillator-Kepler-Problems. (English and Russian summaries) **(80h:70012)**
Dorodnicyn, V. A. Group properties and invariant solutions of an equation of nonlinear heat transport with a source or a sink. (Russian. English summary) **(80e:80004)**
Konopel'čenko, B. G. On a uniform description of symmetry groups. **(80c:81036)**
Leemon, Howard I. Dynamical symmetries in a spherical geometry. II. **(80g:81032)**
Murhašov, L. M. The method of invariants in problems of the equivalence of ordinary equations. (Russian) **(80m:34039)**
Marinov, M. S. An alternative to the Hamilton-Jacobi approach in classical mechanics. **(80f:70019)**
Michalodimitrakis, M. A contribution to the three-dimensional Copenhagen problem. **(80c:70008)**
Nagae, Saco Note on the SO(4) symmetry of hydrogen atom. **(80c:81037)**
Piljugina, V. B. Behavior of trajectories on the center manifold of a system with one zero root. (Russian) **(80k:58069)**
Rosen, Robert ★Fundamentals of measurement and representation of natural systems. **(80c:93005)**

58F40 Applications

Secondary classifications:

Akin, Ethan ★The geometry of population genetics. **(80m:92007)**
de Almeida N. Junqueira, José Luiz The elliptic problem for the evolution of models of celestial motions. (Portuguese) **(80e:70011)**
Bogojavlenskiĭ, O. I. Nonlinear oscillation regimes in some physical problems. **(80j:34053)**
Cohen, Jeffrey M. *See* **Ftaclas, Christ, (80e:83040)**
Ftaclas, Christ (*with* Cohen, Jeffrey M.) Charged homogeneous cosmologies. **(80e:83040)**
Grebenikov, E. A. (*with* Rjabov, Ju. A.) ★Резонансы и малые знаменатели в небесной механике. (Russian) [Resonances and small denominators in celestial mechanics] **(80e:70014)**
Jantzen, Robert T. The dynamical degrees of freedom in spatially homogeneous cosmology. **(80j:83033)**
Kaufman, Allan N. The Lie transform: a new approach to classical perturbation theory. **(80e:70022)**
Mahan'kov, V. G. Dynamics of classical solitons (in nonintegrable systems). **(80i:81044)**
Rabinovič, M. I. Stochastic self-oscillations and turbulence. **(80k:58076)**
Rjabov, Ju. A. *See* **Grebenikov, E. A., (80e:70014)**
Rosen, Bernard Operator method for the perturbative solution of ordinary differential equations. **(80h:34069)**
Šandarin, S. F. Evolution of perturbations in Friedman's models of the universe. (Russian. English summary) **(80m:83053)**
San Miguel, M. A class of exactly solvable Fokker-Planck equations. **(80e:82011)**
Szebehely, Victor G. General considerations of stability in celestial mechanics. **(80m:70016)**

58F99 None of the above, but in this section

Golubitsky, Martin (*with* Schaeffer, David G.) A theory for imperfect bifurcation via singularity theory. **80j:58061**
Hale, Jack K. Some remarks on averaging and integral manifolds in evolutionary equations. (Russian summary) **80b:58052**
Roguski, Jan Partial differential equations and dynamical systems. **80a:58029**
Schaeffer, David G. *See* **Golubitsky, Martin, 80j:58061**

Secondary classifications:

Đaja, Časlav Quasirecurrent motions of dynamical systems in metric spaces. (Serbo-Croatian. German summary) **(80k:54075)**
De Oliveira, Jose C. F. The generic ϑ_1-property for a class of NFDE's. **(80j:34104)**
Droz-Vincent, Philippe Systèmes relativistes à N corps. (English summary) **(80d:83057)**
Elfimov, V. S. Geometric investigation of the motion of a Lagrange gyroscope. (Russian) **(80d:70007)**
Germanov, O. S. (*with* Pisareva, N. M.; Jakovlev, E. I.) The first integral of geodesic lines and symmetry groups. (Russian) **(80c:53008)**
Gogosov, V. V. (*with* Korovin, V. M.; Poljanskiĭ, V. A.) Investigation of the structure of electrohydrodynamic shock waves using the complete equation of motion for the charged component instead of Ohm's law. **(80d:76101)**
Golubitsky, Martin (*with* Schaeffer, David G.) Imperfect bifurcation in the presence of symmetry. **(80j:58017)**
Grabowski, Janusz Isomorphisms and ideals of the Lie algebras of vector fields. **(80g:57036)**

Green, M. B. Discrete and abelian lattice gauge theories. (80i:81035)
Harrison, Jenny Unsmoothable diffeomorphisms on higher dimensional manifolds. (80g:57045)
Hirsch, Morris W. Stability of stationary points of group actions. (80k:57073)
Jakovlev, E. I. *See* Germanov, O. S.; et al., (80c:53008)
Korovin, V. M. *See* Gogosov, V. V.; et al., (80d:76101)
Liedl, R. Ein Transportproblem. (80j:39013)
Luna, D. Remarques sur un article de J. W. Robbin: "Lie algebras of infinitesimal norm isometries" (Linear Algebra and Appl. **10** (1975), 95–102). (80a:22026)
Moulin-Ollagnier, Jean (*with* Pinchon, Didier) Groupes pavables et principe variationnel. (80g:28019)
Murdock, J. A. On the well-posed two-body problem in electrodynamics and special relativity. II. (80g:78004)
Pinchon, Didier *See* Moulin-Ollagnier, Jean, (80g:28019)
Pinaeva, N. M. *See* Germanov, O. S.; et al., (80c:53008)
Poljanskiĭ, V. A. *See* Gogosov, V. V.; et al., (80d:76101)
Reich, L. *See* Schwaiger, Jens, (80i:39011)
(Robbin, Joel W.) *See* Luna, D., (80a:22026)
Roussarie, Robert Singularités des champs de vecteurs et existence d'intégrales premières. (80f:58005)
Sanchez, Luis A note on a differentiable equation of the dynamics of wires. (French summary) (80i:34027)
Schaeffer, David G. *See* Golubitsky, Martin, (80j:58017)
Schuster, P. (*with* Sigmund, K.; Wolff, R.) Dynamical systems under constant organization. I. Topological analysis of a family of non-linear differential equations—a model for catalytic hypercycles. (80a:92020)
Schwaiger, Jens (*with* Reich, L.) Über die Funktionalgleichung $N \circ T = T \circ M$ für formale Potenzreihen. (80i:39011)
Sigmund, K. *See* Schuster, P.; et al., (80a:92020)
Terras, Riho On the existence of a density. (80h:10066)
Wolff, R. *See* Schuster, P.; et al., (80a:92020)

58Gxx Partial differential equations on manifolds; differential operators [See also 35–XX.]

Secondary classifications:

Duncan, T. E. Stochastic systems in Riemannian manifolds. (80j:93132)

58G05 Differential complexes [See also 35Nxx.]; elliptic complexes

Arms, Judith M. An elliptic complex associated to the Yang-Mills constraint equations. 80k:58087
Cardoso, Fernando (*with* Hounie, Jorge G.) Global solvability and hypoellipticity of abstract complexes and equations. 80d:58062
Daniel, M. (*with* Mitter, P. K.; Viallet, C.-M.) Local stability of deformations of self-dual Yang-Mills fields on S^4. 80c:58022
Folland, G. B. (*with* Hung, H. T.) Nonisotropic Lipschitz spaces. 80k:58088
Gaveau, Bernard Systèmes dynamiques associés à certains opérateurs hypoelliptiques. (English summary) 80b:58053
Helffer, Bernard (*with* Nourrigat, Jean François) Opérateurs hypoelliptiques sur des groupes nilpotents. 80m:58037
Hounie, Jorge G. *See* Cardoso, Fernando, 80d:58062
Hung, H. T. *See* Folland, G. B., 80k:58088
Maigrange, B. Algebraic aspects of the theory of partial differential equations. 80d:58063
Melin, A. Free systems of vector fields. 80d:58064
Mitter, P. K. *See* Daniel, M.; et al., 80c:58022
Nourrigat, Jean François *See* Helffer, Bernard, 80m:58037
Rothschild, Linda Preiss Smoothness of solutions of certain partial differential equations constructed from vector fields. 80m:58038
A criterion for hypoellipticity of operators constructed from vector fields. 80c:58040
Stanton, Nancy K. The fundamental solution of the heat equation associated with the $\bar\partial$-Neumann problem. 80j:58062
Tartakoff, David S. Local analytic hypoellipticity for $\Box_b$ on nondegenerate Cauchy-Riemann manifolds. 80g:58045
Viallet, C.-M. *See* Daniel, M.; et al., 80c:58022

Secondary classifications:

Bratli, Giuliano Solution of a conjecture of De Giorgi in $\mathbf{R}^2$. (Italian) (80m:35030)
Cardoso, Fernando ★Resolubilidade local de equações diferenciais parciais. (Portuguese) [Local solvability of partial differential equations] (80c:35004)
Černomaz, V. N. On the problem of homotopic classification of multidimensional elliptic systems. (Russian) (80k:35033)
Čirka, E. M. Regularization and $\bar\partial$-homotopy on a complex manifold. (Russian) (80j:32015)
Geller, Daryl Fourier analysis on the Heisenberg group. (80g:22011)
Helffer, Bernard (*with* Nourrigat, Jean François) Hypoellipticité maximale pour des opérateurs polynômes de champs de vecteurs. (English summary) (80k:35018)
Hounie, Jorge G. A note on global hypoellipticity. (80i:35049)
Globally hypoelliptic and globally solvable first-order evolution equations. (80k:35035)
Kim, Jongsik Hypoellipticity in the complexes of pseudodifferential operators. (80a:35027)
Kohn, J. J. Subelliptic estimates. (80i:35134)
Krantz, Steven George Intrinsic Lipschitz classes on manifolds with applications to complex function theory and estimates for the $\bar\partial$ and $\bar\partial_b$ equations. (80b:26020)
Langenbruch, Michael *P*-Funktionale und Randwerte zu hypoelliptischen Differentialoperatoren. (80k:35036)
Laville, Guy Ensembles de mesure nulle pour certaines mesures dans le groupe d'Heisenberg. (English summary) (80d:32021)
Nourrigat, Jean François *See* Helffer, Bernard, (80k:35018)
Popivanov, P. R. Local properties of pseudodifferential operators with multiple characteristics. (Russian) (80m:35002)
Rothschild, Linda Preiss (*with* Tartakoff, David S.) Parametrices with C^∞ error for $\Box_b$ and operators of Hörmander type. (80g:35039)
Saka, Kōichi A generalization of Cauchy-Riemann equations on a Riemannian symmetric space and the H^p space theory. (80k:32007)
Tartakoff, David S. *See* Rothschild, Linda Preiss, (80g:35039)

58G07 Relations with hyperfunctions

Bony, Jean-Michel Hyperfonctions et équations aux dérivées partielles (d'après M. Sato, T. Kawai et M. Kashiwara). 80i:58035
van den Essen, Arno Le noyau de l'opérateur $\partial/\partial x_n$ agissant sur un $\mathcal{O}_n$-module. (English summary) 80f:58041
Kashiwara, Masaki (*with* Schapira, Pierre) Problème de Cauchy pour les systèmes d'équations différentielles et microdifférentielles dans le domaine complexe. 80k:58044
Introduction to the theory of hyperfunctions. 80m:58039
(*with* Kawai, Takahiro) On the characteristic variety of a holonomic system with regular singularities. 80k:58089
Kawai, Takahiro *See* Kashiwara, Masaki, 80k:58089
Laurent, Yves ★Existence d'une solution à spectre singulier imposé pour une classe d'opérateurs pseudo-différentiels. 80b:58054
Double microlocalisation et problème de Cauchy dans le domaine complexe. 80i:58036
Deuxième microlocalisation. Systèmes d'équations 2-microdifférentielles. (English summary) 80m:58040
Schapira, Pierre *See* Kashiwara, Masaki, 80k:58044
Trauber, Philip Un théorème de Stone-von Neumann formel. (English summary) 80i:58090

Secondary classifications:

Malikov, H. M. A versal integral of type A_4 and a maximally overdetermined system. (Russian. Tajiki summary) (80h:32024)
Perelomov, A. M. Instantons and Kähler manifolds. (80c:81072)
Ramis, Jean-Pierre Géométrie analytique et géométrie algébrique (variations sur le thème "GAGA"). (80g:32014)
Schapira, Pierre Conditions de positivité dans une variété symplectique complexe. Applications à l'étude des microfonctions. (English summary) (80k:32025)
Zeilberger, Doron Solutions of exponential growth to systems of partial differential equations. (80h:35030)

58G10 Index theory and fixed point theorems

Bott, Raoul (*with* Seeley, R.) Some remarks on the paper of Callias: "Axial anomalies and index theorems on open spaces" [Comm. Math. Phys. **62** (1978), no. 3, 213–234; MR 80h:58045a]. 80h:58045b
Boutet de Monvel, Louis On the index of Toeplitz operators of several complex variables. 80j:58063
Callias, Constantine Axial anomalies and index theorems on open spaces. 80h:58045a
See also Bott, Raoul; et al., 80h:58045b
Cheeger, Jeff Analytic torsion and the heat equation. 80j:58065a
Connes, Alain (*with* Moscovici, Henri) The L^2-index theorem for homogeneous spaces. 80g:58046
Duncan, T. E. The heat equation, the Kac formula and some index formulas. 80g:58047
Kawasaki, Tetsuro The Riemann-Roch theorem for complex *V*-manifolds. 80f:58043
Liang, Chao Chu A *G*-signature theorem for *V*-manifolds. 80d:58065
Moscovici, Henri *See* Connes, Alain, 80g:58046
Müller, Werner Analytic torsion of Riemannian manifolds. 80j:58064
Analytic torsion and *R*-torsion of Riemannian manifolds. 80j:58065b
Seeley, R. *See* Bott, Raoul, 80h:58045b
Ščerčenko, V. I. Analogue of the Atiyah-Singer formula in the problem of the homotopy classification of elliptic systems. (Russian) 80c:58023
Stanton, Nancy K. Holomorphic *R*-torsion for fiber bundles. 80c:58034
Teleman, Nicolae Global analysis on PL-manifolds. 80k:58091

Secondary classifications:

Aharonov, Y. (*with* Casher, A.) Ground state of a spin-$\frac{1}{2}$ charged particle in a two-dimensional magnetic field. (80d:81007)
Atiyah, Michael Francis (*with* Hitchin, N. J.; Singer, Isadore) Self-duality in four-dimensional Riemannian geometry. (80d:53023)
Casher, A. *See* Aharonov, Y., (80d:81007)
Cheeger, Jeff On the spectral geometry of spaces with cone-like singularities. (80k:58098)
Christensen, S. M. (*with* Duff, M. J.) New gravitational index theorems and super theorems. (80g:83040)
Corrigan, E. (*with* Goddard, Peter; Templeton, S.) Instanton Green functions and tensor products. (80b:81041)
Deundjak, V. M. Homotopy classification of Noetherian systems of multidimensional bisingular integral operators. (Russian) (80j:47041)
See also Glebov, A. V., (80e:45002)
Donnelly, Harold Eta invariants for *G*-spaces. (80m:58042)
Duff, M. J. *See* Christensen, S. M., (80g:83040)
Frolov, I. V. *See* Romanov, V. N.; et al., (80b:81091)
Gibbons, G. W. (*with* Perry, Malcolm J.) Black holes and thermal Green functions. (80b:83045)

(*with* Hawking, S. W.) Classification of gravitational instanton symmetries. (80d:83025)

Gidas, Basilis Deformations and spectral properties of merons. (80k:81093)

Glebov, A. V. (*with* Deundjak, V. M.) Homotopy classification of Noetherian systems of singular and bi-singular integral equations with discontinuous coefficients. (Russian) (80c:45002)

Goddard, Peter *See* **Corrigan, E.; et al.,** (80b:81041)

Hawking, S. W. (*with* Pope, C. N.) Symmetry breaking by instantons in supergravity. (80b:83027)

See also **Gibbons, G. W., (80d:83025)**

Hegenbarth, Friedrich An application of the ρ-invariant. (80g:57029)

Hitchin, N. J. *See* **Atiyah, Michael Francis; et al., (80d:53023)**

Isham, Christopher J. Spinor fields in four-dimensional space-time. (80b:81122)

Marino, E. C. (*with* Swieca, J. A.) Non-integer topological number and infiniteness of action. (80b:81075)

Page, Don N. Green's functions for gravitational multi-instantons. (80k:81076)

Perry, Malcolm J. Anomalies in supergravity. (80b:81125)

See also **Gibbons, G. W., (80b:83045)**

Petry, Herbert Rainer Exotic spinors in superconductivity. (80c:55011)

Pope, C. N. *See* **Hawking, S. W., (80b:83027)**

Romanov, V. N. (*with* Frolov, I. V.; Švarc, A. S.) Spherically symmetric solitons. (Russian. English summary) (80b:81091)

Schulze, B.-W. Elliptic boundary value problems for operators of a special form. (Russian) (80f:58045)

Singer, Isadore *See* **Atiyah, Michael Francis; et al., (80d:53023)**

Švarc, A. S. The partition function of a degenerate functional. (80f:81091)
Instantons and fermions in the field of instanton. (80h:81060)

See also **Romanov, V. N.; et al., (80b:81091)**

Swieca, J. A. *See* **Marino, E. C., (80b:81075)**

Templeton, S. *See* **Corrigan, E.; et al., (80b:81041)**

Toledo, Domingo (*with* Tong, Yue Lin Lawrence) Duality and intersection theory in complex manifolds. II. The holomorphic Lefschetz formula. (80j:32045)

Tong, Yue Lin Lawrence *See* **Toledo, Domingo, (80j:32045)**

Wagoner, J. B. Diffeomorphisms, K_2, and analytic torsion. (80e:57036)

Yuille, A. L. Yang-Mills instantons in self-dual spacetimes. (80c:81074)

Žadan, M. I. Remark on the number of connectivity components of certain sets of systems that are elliptic in the sense of Douglis and Nirenberg. (Russian) (80g:35036)

58G11 Heat and other parabolic equation methods

Secondary classifications:

Manankiandrianasa, Donasca Comportement du noyau de la chaleur d'un opérateur hypoelliptique dégénéré pour des temps petits. (English summary) (80k:32024)

Vauthier, Jacques Théorèmes d'annulation et de finitude d'espaces de 1-formes harmoniques sur une variété de Riemann ouverte. (English summary) (80j:58069)

58G12 Exotic index theories [See also 46L05, 46L10, 46M20.]

Secondary classifications:

Connes, Alain The von Neumann algebra of a foliation. (80f:46057)

Dynin, Alexander Inversion problem for singular integral operators: C^*-approach. (80c:46066)

Fujii, Kazuyuki A representation of complex K-groups by means of a Banach algebra. (80d:55003)

58G15 Pseudodifferential and Fourier integral operators on manifolds

Alvarez Alonso, Josefina On the inversion of pseudodifferential operators. 80f:58043

Boutet de Monvel, Louis Lacunas and transmissions. 80k:58092

Bruyant, Francine Estimations pour la composition d'un grand nombre d'opérateurs pseudo-différentiels d'ordre 0 et une application. (English summary) 80k:58093

Chaperon, Marc Modèles microlocaux pour certains opérateurs pseudodifférentiels fuchsiens. 80b:58055

Colin de Verdière, Yves Sur le spectre des opérateurs elliptiques à bicaractéristiques toutes périodiques. (English summary) 80b:58056

Danilov, V. G. Estimates for a pseudodifferential canonical operator with a complex phase. (Russian) 80b:58057

Gualandri, L. (*with* Marino, Verita) On a formula of Leray. (Italian) 80a:58030

Hirschowitz, André Transmission et symbole sous-principal. (English summary) 80d:58066

(*with* Piriou, A.) Propriétés de transmission pour les distributions intégrales de Fourier. 80e:58041a

Kashiwara, Masaki (*with* Schapira, Pierre) Problème de Cauchy pour les systèmes microdifférentiels dans le domaine complexe. 80a:58031

Lascar, Bernard Le noyau de l'équation des ondes sur une variété riemannienne compacte comme intégrale de chemins. 80d:58067

Lees, J. Alexander Defining Lagrangian immersions by phase functions. 80f:58037

Marino, Verita *See* **Gualandri, L., 80a:58030**

Piriou, A. Propagation et réflexion de la propriété de transmission des distributions de Fourier. 80e:58041b

See also **Hirschowitz, André, 80e:58041a**

Schapira, Pierre *See* **Kashiwara, Masaki, 80a:58031**

Shih, Weishu Une remarque sur les équations aux dérivées partielles. (English summary) 80k:58051

Sternin, B. Ju. Maslov's canonical operator method. (Russian) 80k:58094

Suzuki, Hunio On the definition of the wave front set of a distribution. 80k:58095

Unterberger, André Encore des classes de symboles. 80f:58038
Les opérateurs métadifférentiels. (English summary) 80k:58096

Vey, Jacques Principe de la phase résonnante. (English summary) 80e:58025

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Baouendi, M. S. (*with* Zachmanoglou, E. C.) Unique continuation of solutions of partial differential equations and inequalities from manifolds of any dimension. (80a:35005)
(*with* Goulaouic, C.) Analyticité précisée d'opérateurs intégraux. (80m:35079)
(*with* Treves, F.; Zachmanoglou, E. C.) Flat solutions and singular solutions of homogeneous linear partial differential equations with analytic coefficients. (80h:35034)

Boutet de Monvel, Louis Convergence dans le domaine complexe des séries de fonctions propres. (80f:35185)

Chen, Y. W. Solution of the wave equation in $\mathbf{R}^{n+1}$ with data on a characteristic cone. (80a:35066)

Chikashige, Yūichi (*with* Fujii, Yasunori; Mima, Kotaro) Lorentz invariant string regularized dimensionally by means of hyperfunctions. II. (80a:81083)

Colfman, Ronald (*with* Meyer, Yves) Commutateurs d'intégrales singulières et opérateurs multilinéaires. (English summary) (80a:47076)

Colin de Verdière, Yves Nombre de points entiers dans une famille homothétique de domaines de $\mathbf{R}^n$. (80h:58047)

Cordes, H. O. On pseudodifferential operators and smoothness of special Lie-group representations. (80m:47047)

Córdoba, Antonio (*with* Fefferman, Charles Louis) Wave packets and Fourier integral operators. (80a:35117)

Duistermaat, J. J. The light in the neighborhood of a caustic. (80b:58019)

Fefferman, Charles Louis *See* **Córdoba, Antonio, (80a:35117)**

Fujii, Yasunori *See* **Chikashige, Yūichi; et al., (80a:81083)**

Fujiwara, Daisuke A construction of the fundamental solution for the Schrödinger equations. (80h:35039)

Goulaouic, C. *See* **Baouendi, M. S., (80m:35079)**

Grubb, Gerd Remainder estimates for eigenvalues and kernels of pseudodifferential elliptic systems. (80f:35096)

Hörmander, Lars The Weyl calculus of pseudodifferential operators. (80j:47060)

Hounie, Jorge G. Microlocal estimates for a class of pseudodifferential operators. (80k:35065)

Karasev, M. V. (*with* Nazaĭkinskiĭ, V. E.) Quantization of rapidly oscillating symbols. (Russian) (80j:35097)

Kiselev, V. Ju. Almost periodic Fourier integral operators and hyperbolic equations in spaces of almost periodic functions. (Russian) (80i:47071)

Kitada, Hitoshi Asymptotic behavior of some oscillatory integrals. (80m:35061)

Lascar, Bernard Singularités des solutions d'équations aux dérivées partielles non linéaires. (English summary) (80b:35101)

Melrose, Richard Airy operators. (80a:35118)
Singularities and energy decay in acoustical scattering. (80h:35104)

Meyer, Yves *See* **Colfman, Ronald, (80a:47076)**

Mima, Kotaro *See* **Chikashige, Yūichi; et al., (80a:81083)**

Mosolova, M. V. A new formula for $\ln(e^A e^B)$ in terms of the commutators of the elements A and B. (Russian) (80b:46058)

Motylev, L. Ju. Transformation of the system of Maxwell equations in an inhomogeneous medium to an equation on the rotation group. (Russian. English summary) (80k:78012)

Nazaĭkinskiĭ, V. E. *See* **Karasev, M. V., (80j:35097)**

Patissier, Guy Sur les fonctions d'un opérateur pseudo-différentiel elliptique. (80g:35129)

Popivanov, P. R. Some local and semi-global properties of linear pseudo-differential equations with double characteristics. (80c:35106)

Rideau, G. Erratum and addendum: "Quantization of the Maxwell field in linear conformal invariant gauges" [Lett. Math. Phys. 3 (1979), no. 3, 229–235; MR 80i:78003]. (80k:81213)

Thompson, Mark Coercive inequalities for pseudodifferential operators of constant rank. (80a:35121)

Treves, F. *See* **Baouendi, M. S.; et al., (80h:35034)**

Vaugon, Michel Équations différentielles non linéaires sur les variétés riemanniennes compactes. (English summary) (80i:35081)

Voros, André Semiclassical ergodicity of quantum eigenstates in the Wigner representation. (80k:81060)

Widom, Harold Spectral asymptotics of hypersurfaces. (80d:47080)

Zachmanoglou, E. C. *See* **Baouendi, M. S., (80a:35005)** *and* **Baouendi, M. S.; et al., (80h:35034)**

58G16 Hyperbolic equations

Alinhac, S. L. A class of hyperbolic operators with double involutive characteristics of Fuchsian type. 80b:58059

Schimming, Rainer Das Huygenssche Prinzip bei linearen hyperbolischen Differentialgleichungen zweiter Ordnung für allgemeine Felder. 80d:58068

Secondary classifications:

Berzin, Robert (*with* Vaillant, Jean) Systèmes hyperboliques à caractéristiques multiples. (80f:35073)

Gardner, Robert B. Constructing Bäcklund transformations. (80k:58007)

Lascar, Bernard Le noyau de l'équation des ondes sur une variété riemannienne compacte comme intégrale de chemins. (80d:58067)

Malikov, H. M. A versal integral of type A_k and a maximally overdetermined system. (Russian. Tajiki summary) (80h:32024)

Rumpf, Helmut Creation of Dirac particles in general relativity with torsion and electromagnetism. I. The general formalism. (80f:83038a)
Creation of Dirac particles in general relativity with torsion and electromagnetism. II. The constant electric field—a "pedagogical" example. (80f:83038b)
Creation of Dirac particles in general relativity with torsion and electromagnetism. III. Matter production in a model of torsion. (80m:83023)

Vaillant, Jean *See* Berzin, Robert, (80f:35073)

58G17 Propagation of singularities; initial value problems

Kashiwara, Masaki (*with* Schapira, Pierre) Micro-hyperbolic systems. 80b:58060
Schapira, Pierre *See* Kashiwara, Masaki, 80b:58060
Sjöstrand, Johannes Sur la propagation des singularités analytiques pour certains problèmes de Dirichlet. (English summary) 80c:58026

Secondary classifications:

Alinhac, S. L. Branching of singularities for a class of hyperbolic operators. (80f:35012)
Candelas, P. (*with* Dowker, J. S.) Field theories on conformally related space-times: some global considerations. (80c:83035)
Dowker, J. S. *See* Candelas, P., (80c:83035)
Hörmander, Lars Spectral analysis of singularities. (80m:35058)
Imai, Masato (*with* Shirota, Taira) On a parametrix for the hyperbolic mixed problem with diffractive lateral boundary. (80f:35081)
Sharma, V. D. (*with* Shyam, Radhe) Growth of discontinuities in fluids with internal relaxation. (80j:76042)
Shirota, Taira *See* Imai, Masato, (80f:35081)
Shyam, Radhe *See* Sharma, V. D., (80j:76042)
Taylor, Michael E. Rayleigh waves in linear elasticity as a propagation of singularities phenomenon. (80l:73016)

58G20 Boundary value problems

Berger, Melvyn S. (*with* Church, P. T.) Complete integrability and perturbation of a nonlinear Dirichlet problem. I. 80k:58097
Church, P. T. *See* Berger, Melvyn S., 80k:58097
Finn, Robert Existence and nonexistence of capillary surfaces. 80f:58044a
(*with* Giusti, Enrico) Nonexistence and existence of capillary surfaces. 80f:58044b
Giusti, Enrico *See* Finn, Robert, 80f:58044b
Paquet, Luc Problèmes mixtes pour le système de Maxwell. (English summary) 80i:58039
Schulze, B.-W. Elliptic boundary value problems for operators of a special form. (Russian) 80f:58045

Secondary classifications:

Fujiwara, Daisuke A remark on the Hadamard variational formula. (80l:35060)
Goldschmidt, Bernd Cousinsche Glättungsprobleme für lineare partielle Differentialgleichungen. (80j:35017)
Jäger, Willi (*with* Kaul, Helmut) Uniqueness of harmonic mappings and of solutions of elliptic equations on Riemannian manifolds. (80d:58021)
Jauniauskas, Algimantas ★Аналитическая теория эллиптических уравнений. (Russian) [The analytic theory of elliptic equations] (80k:35041)
Kaul, Helmut *See* Jäger, Willi, (80d:58021)
Khelif, Abdelkader Problèmes aux limites pour le laplacien dans un domaine à points cuspides. (English summary) (80b:35050)
Le Hyu Zien Topological classification of general boundary value problems in the plane for systems which are elliptic in the sense of Petrovskiĭ. (Russian. English summary) (80j:35034)
Rempel, Stephan On pseudodifferential operators smooth on manifolds with boundary. (80i:35189)
Schulze, B.-W. Over- and under-determined elliptic boundary value problems. (Russian) (80e:35046)

58G25 Spectral problems; spectral geometry; scattering theory

Bérard, Pierre H. Spectrum and geometry. (Portuguese) 80d:58069
Spectres et groupes cristallographiques. (English summary) 80m:58041
Berger, Marcel Une inégalité universelle pour la première valeur propre du laplacien. (English summary) 80f:58046
Bezjaev, V. I. Asymptotic behavior of the eigenvalues of hypoelliptic operators on a closed manifold. (Russian) 80h:58046
Boutet de Monvel, Louis Convergence dans le domaine complexe des séries de fonctions propres. (English summary) 80i:58040
Buser, Peter Cubic graphs and the first eigenvalue of a Riemann surface. 80b:58061
Beispiele für λ_1 auf kompakten Mannigfaltigkeiten. 80d:58070
Chavel, I. (*with* Feldman, E. A.) Spectra of domains in compact manifolds. 80c:58027
Chazarain, Jacques Spectre d'un hamiltonien quantique et périodes des trajectoires classiques. (English summary) 80b:58062
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Donnelly, Harold Eta invariants for G-spaces. 80m:58042
G-spaces, the asymptotic splitting of $L^2(M)$ into irreducibles. 80b:58063
Asymptotic expansions for the compact quotients of properly discontinuous group actions. 80h:58049
Ejiri, Norio A construction of nonflat, compact irreducible Riemannian manifolds which are isospectral but not isometric. 80h:58050
Feldman, E. A. *See* Chavel, I., 80c:58027
Fitouhi, Ahmed Fonction zêta d'Epstein pour un opérateur elliptique qui dégénère dans la direction normale. 80g:58048
Friedland, Shmuel Extremal eigenvalue problems defined on conformal classes of compact Riemannian manifolds. 80k:58099
Furutani, Kenrô A group of isometries and eigenspaces of a Laplace operator on S^2. 80i:58041
Gallot, Sylvestre Équations différentielles caractéristiques de la sphère. 80b:58051
Gilkey, Peter B. The residue of the local eta function at the origin. 80f:58047
Guillemin, Victor (*with* Melrose, Richard) The Poisson summation formula for manifolds with boundary. 80j:58066
Günther, Paul (*with* Schimming, Rainer) Curvature and spectrum of compact Riemannian manifolds. 80b:58064
Problème de réseaux dans les espaces hyperboliques. (English summary) 80b:58065
Ii, Kiyotaka On the multiplicities of the spectrum for quasi-classical mechanics on spheres. 80a:58032
Ikeda, Akira (*with* Yamamoto, Yoshihiko) On the spectra of 3-dimensional lens spaces. 80e:58042
Iwasaki, Ichiro (*with* Katase, Kiyoshi) On the spectra of Laplace operator on $\Lambda^*(S^n)$. 80h:58052
Katase, Kiyoshi *See* Iwasaki, Ichiro, 80h:58052
Kočarovskiĭ, V. G. Eigenfunctions of the Laplace operator on the unit sphere. (Ukrainian. English and Russian summaries) 80a:58033
Kokkinos, C. *See* Tsagas, Grigorios, 80b:58068
Lange, Frieder-Jens (*with* Simon, Udo) Eigenvalues and eigenfunctions of Riemannian manifolds. 80h:58053
Maeda, Masao On the eigenvalues of Laplacian. 80e:58043
Melrose, Richard *See* Guillemin, Victor, 80j:58066
Pinsky, Mark A. The spectrum of the Laplacian on a manifold of negative curvature. I. 80g:58049
Ralston, James V. Erratum: "On the construction of quasimodes associated with stable periodic orbits" (Comm. Math. Phys. 51 (1976), no. 3, 219–242). 80e:58044
Randol, Burton The length spectrum of a Riemann surface is always of unbounded multiplicity. 80k:58100
Sampson, J. H. Foliations from quadratic and Hermitian differential forms. 80k:58042
Schimming, Rainer *See* Günther, Paul, 80b:58064
Simon, Udo *See* Lange, Frieder-Jens, 80h:58053
Sunada, Toshikazu Spectrum of a compact flat manifold. 80c:58028
Tagawa, Masa-yoshi Geometry of Kählerian manifolds related by the spectrum for exterior 1-forms and 2-forms. 80k:58101
Tanikawa, Masao The spectrum of the Laplacian and smooth deformation of the Riemannian metric. 80e:58045
Tanno, Shûkichi The first eigenvalue of the Laplacian on spheres. 80g:58050
Tsagas, Grigorios The spectrum of the Bochner-Laplace operator on the 1-forms on a compact Riemannian manifold. 80b:58067
On the spectrum of the Laplacian on the 1-forms on a compact Riemannian manifold. 80b:58066
(*with* Kokkinos, C.) The geometry and the Laplace operator on the exterior 2-forms on a compact Riemannian manifold. 80b:58068
Tsukada, Kazumi Locally symmetric Einstein-Kaehler manifolds and spectral geometry. 80g:58051
Unterberger, André Décompositions spectrales approchées associées à une famille d'oscillateurs harmoniques. (English summary) 80b:58069
Urakawa, Hajime On the least positive eigenvalue of the Laplacian for compact group manifolds. 80e:58046
Widom, Harold The Laplace operator with potential on the 2-sphere. 80d:58071
Eigenvalue distribution theorems for certain homogeneous spaces. 80h:58054
Wolfe, William The asymptotic distribution of lattice points in hyperbolic space. 80h:58055
Wolpert, Scott The length spectra as moduli for compact Riemann surfaces. 80j:58067
Yamaguchi, Satoru Spectra of flag manifolds. 80h:58056
Yamamoto, Yoshihiko *See* Ikeda, Akira, 80e:58042

Secondary classifications:

Alberverio, Sergio (*with* Hoegh-Krohn, Raphael) Feynman path integrals and the corresponding method of stationary phase. (80k:81035)
Arca, Giuseppe *See* Matzeu, Paola Maria, (80a:53052)
Belavin, A. A. (*with* Zaharov, V. E.) Yang-Mills equations as inverse scattering problem. (80b:81069)
Belger, Martin Zur Greenschen Form auf der Kugel. (80m:53037)
Buser, Peter Riemannsche Flächen mit grosser Kragenweite. (80k:53071)
The collar theorem and examples. (80h:53046)
Cartier, Pierre Spectre de l'équation de Schrödinger, application à la stabilité de la matière (d'après J. Lebowitz, E. Lieb, B. Simon et W. Thirring). (80g:81062)
Chen, Su Shing Spectra of discrete uniform subgroups of semisimple Lie groups. (80e:22016)
Corrigan, E. Self-dual solutions to Euclidean Yang-Mills equations. (80b:81071)
Donnelly, Harold (*with* Li, Peter) Pure point spectrum and negative curvature for noncompact manifolds. (80j:35075)
Gallot, Sylvestre Un théorème de pincement et une estimation sur la première valeur propre du laplacien d'une variété riemannienne. (English summary) (80j:53045)
Gerdžikov, V. S. (*with* Kulish, P. P.) Derivation of the Bäcklund transformation in the formalism of the inverse scattering problem. (Russian. English summary) (80b:81069)
Gilkey, Peter B. Recursion relations and the asymptotic behavior of the eigenvalues of the Laplacian. (80l:53020)
Grubb, Gerd Remainder estimates for eigenvalues and kernels of pseudodifferential elliptic systems. (80f:35096)
Guillemin, Victor (*with* Melrose, Richard) An inverse spectral result for elliptical regions in $\mathbf{R}^2$. (80f:35104)
(Helgason, Sigurður) *See* Lacroix, Jean, (80j:22008)
Hersch, Joseph Membranes symétriques d'égale fréquence fondamentale. (English summary) (80g:53031)
Hoegh-Krohn, Raphael *See* Alberverio, Sergio, (80k:81035)
Korsch, H. J. Semiclassical densities in phase space: Wigner's distribution function for thermodynamic equilibrium. (80k:81054)
Koszykowski, M. L. *See* Nold, D. W.; et al., (80k:81056)

Kulli, P. P. *See* **Gerdžikov, V. S., (80k:81009)**
Lachaud, Gilles Variations sur un thème de Mahler. **(80h:10057)**
Lacroix, Jean Représentation des fonctions propres sur un espace symétrique (d'après Helgason). **(80j:22008)**
Langouche, F. (*with* Roekaerts, D.; Tirapegui, E.) Higher-order corrections through functional integrals to the WKB expansion in curved spaces. **(80j:81021)**
Lévy-Bruhl-Laperrière, Anne Spectre du de Rham Hodge sur l'espace projectif complexe. **(80g:43016)**
Li, Peter *See* **Donnelly, Harold, (80j:35075)**
Majda, Andrew (*with* Ralston, James V.) An analogue of Weyl's theorem for unbounded domains. II. **(80b:35114)**
Marcus, R. A. *See* **Noid, D. W.; et al., (80k:81056)**
Mutzen, Paola Maria (*with* Arca, Giuseppe) On the Laplacian of the sphere. (Italian. French summary) **(80a:53052)**
Melrose, Richard *See* **Guillemin, Victor, (80f:35104)**
Noid, D. W. (*with* Koszykowski, M. L.; Marcus, R. A.) Semiclassical calculation of bound states in multidimensional systems with Fermi resonance. **(80k:81056)**
Ozawa, Shin The eigenvalues of the Laplacian and perturbation of boundary condition. **(80e:35051)**
Ralston, James V. *See* **Majda, Andrew, (80b:35114)**
Randol, Burton Cylinders in Riemann surfaces. **(80j:30065)**
Reckziegel, Helmut On the eigenvalues of the shape operator of an isometric immersion into a space of constant curvature. **(80h:53057)**
Roekaerts, D. *See* **Langouche, F.; et al., (80j:81021)**
Seeley, R. A sharp asymptotic remainder estimate for the eigenvalues of the Laplacian in a domain of R^3. **(80a:35096)**
Šestopal, A. F. A spectral problem for the Laplace operator in domains of mirror-symmetric polyhedra. (Russian) **(80e:35049)**
Skriganov, M. M. *See* **Venkov, A. B., (80f:10036)**
Švarc, A. S. Instantons and fermions in the field of instanton. **(80h:81060)**
Tanno, Shûkichi On a lower bound of the second eigenvalue of the Laplacian on an Einstein space. **(80b:53035)**
Tirapegui, E. *See* **Langouche, F.; et al., (80j:81021)**
Venkov, A. B. The Selberg trace formula for a Hecke operator that is generated by an involution, and eigenvalues of the Laplace-Beltrami operator on the fundamental domain of the modular group PSL (2, Z). (Russian) **(80g:10026)**
Venkov, A. B. (*with* Skriganov, M. M.) On the question of H. Weyl's formula in the spectral theory of automorphic functions. (Russian) **(80f:10036)**
Zaharov, V. E. *See* **Belavin, A. A., (80b:81069)**

58G30 Relations with special manifold structures (Riemannian, Finsler, etc.)

Aubin, Thierry Meilleures constantes dans le théorème d'inclusion de Sobolev et un théorème de Fredholm non linéaire pour la transformation conforme de la courbure scalaire. (English summary) **80f:58043**
Chaljub-Simon, Alice (*with* Choquet-Bruhat, Yvonne) Problèmes elliptiques du second ordre sur une variété euclidienne à l'infini. (English summary) **80f:58044**
Choquet-Bruhat, Yvonne *See* **Chaljub-Simon, Alice, 80f:58044**
Ikeda, Mineo (*with* Nishino, Yoshio) On the symmetry of nondegenerate, selfadjoint differential operators of the second order. **80g:58052**
Lyčagin, V. V. Contact geometry and second-order nonlinear differential equations. (Russian) **80h:58057**
Nishino, Yoshio *See* **Ikeda, Mineo, 80g:58052**
Thom, René Sur certains aspects qualitatifs de la théorie des équations aux dérivées partielles. **80j:58068**

58G32 Diffusion processes and stochastic analysis on manifolds

Ducourtioux, Jean-Louis Temps de vie des solutions de l'équation de la chaleur de Eells-Sampson. (English summary) **80f:58048**
Malliavin, Paul C^k-hypoellipticity with degeneracy. **80i:58045a**
C^k-hypoellipticity with degeneracy. II. **80i:58045b**
Stochastic Jacobi fields. **80k:58046**
Méritet, Alain Théorème d'annulation pour la cohomologie absolue d'une variété riemannienne à bord. (English summary) **80k:58102**
Vauthier, Jacques Théorèmes d'annulation et de finitude d'espaces de 1-formes harmoniques sur une variété de Riemann ouverte. (English summary) **80j:58069**

Secondary classifications:

Berthier, Anne-Marie (*with* Gaveau, Bernard) Critère de convergence des fonctionnelles de Kac et application en mécanique quantique et en géométrie. **(80g:60079)**
Bess, Leon A diffusion model for the Dirac equation. **(80b:81035)**
Duncan, T. E. The heat equation, the Kac formula and some index formulas. **(80g:58047)**
Feinsilver, Philip J. ★Special functions, probability semigroups, and Hamiltonian flows. **(80c:60093a)**
Operator calculus. **(80c:60093b)**
Gaveau, Bernard *See* **Berthier, Anne-Marie, (80g:60079)**
Hongler, M.-O. Exact time dependent probability density for a nonlinear non-Markovian stochastic process. **(80k:82012)**
Jorgensen, E. Construction of the Brownian motion and the Ornstein-Uhlenbeck process in a Riemannian manifold on basis of the Gangolli-McKean injection scheme. **(80c:60094)**
Larisch, Ernest Steady states of weakly dissipative systems. **(80a:82007)**
Manabe, Shojiro On the intersection number of the path of a diffusion and chains. **(80b:60102)**
Méritet, Alain Un théorème ergodique pour le temps local sur une variété riemannienne compacte à bord. (English summary) **(80c:60091)**
Michel, Dominique Produit de deux diffusions. (English summary) **(80g:60080)**
Taylor, John C. Some remarks on Malliavin's comparison lemma and related topics. **(80h:60097)**

58G35 Invariance properties

Ovsjannikov, L. V. ★Групповой анализ дифференциальных уравнений. (Russian) [Group analysis of differential equations] **80d:58072**

Secondary classifications:

Avis, S. J. (*with* Isham, Christopher J.; Storey, D.) Quantum field theory in anti-de Sitter space-time. **(80c:81134)**
Boguš, A. A. (*with* Kruglov, S. I.; Stražev, V. I.) A group of inner symmetry in the 16-component theory of vector particles. (Russian. English summary) **(80c:81128)**
Drummond, J. E. A tensor theory of gravitation in a curved metric on a flat background. **(80c:83019)**
Enikova, M. M. (*with* Karlukovski, V. I.; Velčev, C. I.) Exact finite-energy solutions in non-linear SU(2)×SU(2) and SU(2)×SU(1, 1) chiral theories. **(80c:35006)**
Fušič, V. I. (*with* Nikitin, A. G.; Salogub, V. A.) On the non-relativistic motion equations in the Hamiltonian form. **(80c:81129)**
(*with* Nikitin, A. G.) On the new invariance algebras of relativistic equations for massless particles. **(80c:81035)**
(*with* Nikitin, A. G.) On the new invariance group of Maxwell equations. **(80c:78006)**
Gardner, Robert B. Constructing Bäcklund transformations. **(80k:58007)**
Goldberg, Joshua N. Self-dual gauge fields. **(80h:81091)**
Hartmann, H. *See* **Ulmer, W., (80c:81050)**
Hoogland, Henk Minimal electromagnetic coupling in elementary quantum mechanics; a group theoretical derivation. **(80c:81131)**
Isham, Christopher J. *See* **Avis, S. J.; et al., (80c:81134)**
Ito, Keiichi R. Construction of two-dimensional quantum electrodynamics based on Hamiltonian formalism. **(80c:81081)**
Kapitanskiĭ, L. V. Group analysis of the Navier-Stokes and Euler equations in the presence of rotation symmetry and new exact solutions to these equations. (Russian) **(80g:35104)**
Karlukovski, V. I. *See* **Enikova, M. M.; et al., (80c:35006)**
Khalil, M. A. K. (*with* Seetharaman, M.) Fisk-Tait equation for spin-3/2 particles. **(80c:81137)**
Reducible relativistic wave equations. **(80d:81147)**
Kruglov, S. I. *See* **Boguš, A. A.; et al., (80c:81128)**
Kryloveckiĭ, A. G. Canonical formalism and relativistic invariance of the Grossmann-Peres model for a classical electron. (Russian) **(80c:81055)**
Kummer, G. *See* **Mahan'kov, V. G.; et al., (80j:81017)**
Mahan'kov, V. G. (*with* Kummer, G.; Švačka, A. B.) Many-dimensional U(1) solitons, their interactions, resonances and bound states. **(80j:81017)**
Nikitin, A. G. The invariance group of the Kemmer-Duffin-Petiau equation for a particle with anomalous moment. (Russian. English summary) **(80f:81049)**
See also **Fušič, V. I., (80c:78006); Fušič, V. I., (80c:81035)** *and* **Fušič, V. I.; et al., (80c:81129)**
Onufrîčuk, S. P. The symmetry groups of Majorana equations. (Russian. English summary) **(80g:81076a)**
See also **Sokur, L. P., (80g:81076b)**
Osterwalder, Konrad (*with* Seiler, Erhard) Lattice gauge theories. **(80c:81083)**
Pommaret, Jean-François Physics and pseudogroups. **(80h:58060)**
Procopiuc, Gh. The equations of radiative relativistic magnetohydrodynamics. Invariance groups for one-dimensional flow. **(80m:76080)**
Ray, Dipankar Some solutions of SU(2) Yang-Mills-Higgs system. **(80c:81073)**
Salogub, V. A. *See* **Fušič, V. I.; et al., (80c:81129)**
Sasaki, R. Some classical solutions of the sourceless SO(4, 1) gauge field equations. **(80g:81055)**
Seetharaman, M. *See* **Khalil, M. A. K., (80c:81137)**
Segeda, Ju. N. The symmetry group of Sobolev's equation. (Russian. English summary) **(80g:35007)**
Seiler, Erhard *See* **Osterwalder, Konrad, (80c:81083)**
Sokur, L. P. (*with* Onufrîčuk, S. P.) Additional symmetry of the generalized Bargmann-Wigner equation with proper time. (Russian. English summary) **(80g:81076b)**
Storey, D. *See* **Avis, S. J.; et al., (80c:81134)**
Stražev, V. I. *See* **Boguš, A. A.; et al., (80c:81128)**
Švačka, A. B. *See* **Mahan'kov, V. G.; et al., (80j:81017)**
Tafiin, Erik Classical V-A theory and nonconservation of the dynamical parity. **(80k:81165)**
Tagirov, È. A. (*with* Todorov, I. T.) A geometric approach to the solution of conformal invariant nonlinear field equations. **(80j:81039)**
Todorov, I. T. *See* **Tagirov, È. A., (80j:81039)**
Ulmer, W. (*with* Hartmann, H.) On a geometric interpretation of Heisenberg's commutation rule and the algebraic structure of the Pauli equation. (Italian and Russian summaries) **(80c:81050)**
Velčev, C. I. *See* **Enikova, M. M.; et al., (80c:35006)**

58G40 Applications

Secondary classifications:

Avis, S. J. (*with* Isham, Christopher J.) Lorentz gauge invariant vacuum functionals for quantized spinor fields in nonsimply connected space-times. **(80h:81085)**
Dupré, Maurice J. (*with* Rosencrans, Steven I.) Classical and relativistic vorticity in a semi-Riemannian manifold. **(80b:58023)**
Fegan, H. D. The heat equation on a compact Lie group. **(80g:22010)**
Gervais, Jean-Loup Collective coordinates with nontrivial dynamics. **(80c:81081)**

Isham, Christopher J. *See* **Avis, S. J., (80b:81085)**
Marinov, M. S. Nonlinear wave equations and differential geometry. **(80f:81066)**
Perry, Malcolm J. *TP* inversion in quantum gravity. **(80d:83044)**
Rosencrans, Steven I. *See* **Dupré, Maurice J., (80b:58023)**
Smith, T. B. Semiclassical approximation in the Weyl picture by path summation. **(80b:81042)**

58G99 None of the above, but in this section

Aubin, Thierry Résolution d'une équation différentielle non linéaire, non inversible localement. (English summary) **80a:58034**
Sur les meilleures constantes dans le théorème d'inclusion de Sobolev. (English summary) **80c:58029**
Chaperon, Marc Singularités en géométrie de contact. **80k:58103**
Kashiwara, Masaki On the holonomic systems of linear differential equations. II. **80a:58035**
Malliavin, Paul Un principe de transfert et son application au calcul des variations. (English summary) **80a:58036a**
Hypoellipticité avec dégénérescence et analyse stochastique en dimension infinie. (English summary) **80a:58036b**
Rempel, Stephan (*with* Schulze, B.-W.) ★Elliptische Operatoren auf berandeten Mannigfaltigkeiten. **80a:58037**
Schulze, B.-W. *See* **Rempel, Stephan, 80a:58037**
Sibner, L. M. (*with* Sibner, R. J.) Nonlinear Hodge theory: applications. **80h:58058**
Sibner, R. J. *See* **Sibner, L. M., 80h:58058**
Udrişte, Constantin Directional derivatives of convex functions on Riemannian manifolds. **80a:58038**

Secondary classifications:

Andreotti, Aldo (*with* Nacinovich, Mauro) On the envelope of regularity for solutions of homogeneous systems of linear partial differential operators. **(80d:35113)**
Banach, Richard *See* **Dowker, J. S., (80d:81142)**
(Bérard Bergery, Lionel) *See* **Besse, Arthur L., (80c:53044)**
(Berger, Marcel) *See* **Besse, Arthur L., (80c:53044)**
Besse, Arthur L. ★Manifolds all of whose geodesics are closed. **(80c:53044)**
(Bourguignon, Jean-Pierre) *See* **Besse, Arthur L., (80c:53044)**
Černomaz, V. N. (*with* Ševčenko, V. I.) Elliptic systems with eight independent variables. (Russian) **(80f:35052)**
Estimation of the number of connected components of a set of real elliptic systems of four and eight equations. (Russian. English summary) **(80a:35040)**
Dowker, J. S. (*with* Banach, Richard) Quantum field theory of Clifford-Klein space-times. The effective Lagrangian and vacuum stress-energy tensor. **(80d:81142)**
(Epstein, D. B. A.) *See* **Besse, Arthur L., (80c:53044)**
Gluck, Herman (*with* Singer, David A.) Scattering of geodesic fields. II. **(80k:53073)**
Ise, Mikio A complex analogue of the generalized Minkowski problem. II. **(80a:53072)**
Ishimura, Ryuichi Homomorphismes du faisceau des germes de fonctions holomorphes dans lui-même et opérateurs différentiels. **(80g:32024)**
Jona-Lasinio, G. (*with* Pierini, S.; Vulpiani, A.) Absence of breakdown of a continuous symmetry in more than two dimensions. **(80a:82019)**
(Kazdan, J. L.) *See* **Besse, Arthur L., (80c:53044)**
Kolk, Johan Antoon Casper ★The Selberg trace formula and asymptotic behaviour of spectra. **(80a:22017)**
Le Hyu Zlen (*with* Ševčenko, V. I.) Homotopy classification of systems of equations on the plane that are elliptic in the sense of Petrovskiĭ. (Russian) **(80a:35038)**
Mutō, Yoshio Riemannian submersion and the Laplace-Beltrami operator. **(80a:53064)**
Nacinovich, Mauro *See* **Andreotti, Aldo, (80d:35113)**
Oliker, V. I. On certain elliptic differential equations on a hypersphere and their geometric applications. **(80f:53031)**
Pierini, S. *See* **Jona-Lasinio, G.; et al., (80a:82019)**
Ramis, Jean-Pierre Géométrie analytique et géométrie algébrique (variations sur le thème "GAGA"). **(80g:32014)**
Sakai, Takashi The manifold of the Lagrangean subspaces of a symplectic vector space. **(80b:58028)**
Ševčenko, V. I. *See* **Le Hyu Zlen, (80a:35038)** *and* **Černomaz, V. N., (80f:35052)**
Singer, David A. *See* **Gluck, Herman, (80k:53073)**
Stromberg, Karl The Banach-Tarski paradox. **(80f:04006)**
Tanno, Shûkichi Some differential equations on Riemannian manifolds. **(80d:53029)**
Vaillant, Jean Propriété de symétrie des matrices localisées d'une matrice fortement hyperbolique en un point multiple. **(80d:35098)**
Vulpiani, A. *See* **Jona-Lasinio, G.; et al., (80a:82019)**

58Hxx Pseudogroups and general structures on manifolds

58H05 Pseudogroups [See also 22E65.]

Abib, Odinete Renée Quelques propriétés sur le normalisateur d'un pseudogroupe de Lie transitif. **80f:58049**
Équations de Lie invariantes par un pseudogroupe de Lie. **80e:58047**
Anderson, Robert L. (*with* Merner, Mark P.) Transitive group structure for the one-body Keplerian problem. **80k:58104**
(*with* Ibragimov, N. H.) ★Lie-Bäcklund transformations in applications. **80e:58048**
Cornes, James *See* **Sym, Antoni, 80d:58074**
Gasqui, Jacques Équivalence projective et équivalence conforme. **80k:58105**
Higa, Tatsuo Les équations différentielles invariantes par les pseudo-groupes. **80k:58106**
Hsiao, Sherman H. C. (*with* Tsai, Han Ping) On Cartan-Sternberg's example of the reduction of G-structure. **80c:58030**
Ibragimov, N. H. (*with* Šabat, A. B.) The Korteweg-de Vries equation from the group standpoint. (Russian) **80i:58047**
On the theory of groups of Lie-Bäcklund transformations. (Russian) **80h:58059**
See also **Anderson, Robert L., 80e:58048**
Kosmann-Schwarzbach, Yvette Sur les transformations de similitude des équations aux dérivées partielles. (English summary) **80d:58073**
Lichnerowicz, André Existence and equivalence of twisted products on a symplectic manifold. **80m:58043**
Mercer, Mark P. *See* **Anderson, Robert L., 80k:58104**
Otterson, Paul *See* **Svetlichny, George, 80i:58049**
Patissier, Guy Déformations différentielles à coefficients constants. (English summary) **80i:58048**
Pommaret, Jean-François Invariants différentiels des transformations de contact. (English summary) **80a:58039**
Physics and pseudogroups. **80h:58060**
Šabat, A. B. *See* **Ibragimov, N. H., 80i:58047**
Svetlichny, George (*with* Otterson, Paul) Derivative dependent infinitesimal deformations of differentiable functions. **80i:58049**
Sym, Antoni (*with* Cornes, James) Lie-group explanation of geometric interpretations of solitons. **80d:58074**
Tsai, Han Ping *See* **Hsiao, Sherman H. C., 80c:58030**
Vosylius, R. Categories of spaces with structure equations. (Russian. Lithuanian and English summaries) **80b:58070**

Secondary classifications:

Arnal, Didier (*with* Cortet, Jean-Claude) Geometrical theory of contractions of groups and representations. **(80j:58034)**
Cortet, Jean-Claude *See* **Arnal, Didier, (80j:58034)**
Fedotov, V. P. Structures generated by invariants. (Russian. English summary) **(80f:58007)**
Gamkrelidze, R. V. Exponential representation of solutions of ordinary differential equations. **(80i:22021)**
Gruiko, P. Ja. Transitivity in the category of pseudostructures. (Russian) **(80j:53040)**
Hoc, B. S. The group of local analytic homeomorphisms of the line and P-groups. (Russian) **(80g:22019)**
Ishihara, Shigeru *See* **Yano, Kentaro, (80e:32016)**
Kaneda, Eiji (*with* Tanaka, Noboru) Rigidity for isometric imbeddings. **(80a:53062)**
Komrakov, B. P. *See* **Vlasov, A. T., (80e:53034)**
Kosmann-Schwarzbach, Yvette Infinitesimal conditions for the equivariance of morphisms of fibered manifolds. **(80j:53041)**
Kostrikin, I. A. Irreducible graded representations of Lie algebras of Cartan type. (Russian) **(80a:17013)**
Lichnerowicz, André Automorphismes et dérivations d'algèbres formelles associées par déformation à une variété symplectique. Le cas général. (English summary) **(80c:58026)**
Motylev, L. Ju. Transformation of the system of Maxwell equations in an inhomogeneous medium to an equation on the rotation group. (Russian. English summary) **(80k:78012)**
Šapovalov, V. N. Symmetry and the separation of variables in the Hamilton-Jacobi equation. I, II. (Russian) **(80k:70025)**
Subinin, S. V. A group property and conservation laws of an equation of transonic motion of a gas. (Russian) **(80k:76037)**
Tanaka, Noboru On the equivalence problems associated with simple graded Lie algebras. **(80h:53034)**
See also **Kaneda, Eiji, (80a:53062)**
Vlasov, A. T. (*with* Komrakov, B. P.) Automorphisms of structures on smooth manifolds. (Russian. English summary) **(80e:53034)**
Webster, S. M. Pseudo-Hermitian structures on a real hypersurface. **(80e:32015)**
The rigidity of C-R hypersurfaces in a sphere. **(80d:32022)**
Yano, Kentaro (*with* Ishihara, Shigeru) Real hypersurfaces of a complex manifold and distributions with complex structure. **(80e:32016)**

58H10 Cohomology of classifying spaces for pseudogroup structures (Spencer, Gel'fand-Fuks, etc.)

Boyer, Charles P. (*with* Piebánski, Jerzy F.) General relativity and G-structures. I. General theory and algebraically degenerate spaces. **80d:58075**
Cohen, F. R. (*with* Taylor, Laurence R.) Computations of Gel'fand-Fuks cohomology, the cohomology of function spaces, and the cohomology of configuration spaces. **80f:58050**
Feigin, B. L. *See* **Gel'fand, I. M.; et al., 80i:58050**
Fuks, D. B. *See* **Gel'fand, I. M.; et al., 80i:58050**
Gel'fand, I. M. (*with* Feigin, B. L.; Fuks, D. B.) Cohomology of infinite-dimensional Lie algebras and Laplace operators. (Russian) **80i:58050**
Kanie, Yukihiro Cohomologies of Lie algebras of vector fields with coefficients in adjoint representations foliated case. **80b:58071**
Lichnerowicz, André Algèbres de Lie attachées à un feuilletage. (English summary) **80i:58051**
Natsume, Toshikazu Certain Weil algebras of infinite-dimensional Lie algebras. **80a:58040**
Piebánski, Jerzy F. *See* **Boyer, Charles P., 80d:58075**
Pommaret, Jean-François Cohomologie de déformation des algèbres de Lie tronquées. (English summary) **80e:58049**
Taylor, Laurence R. *See* **Cohen, F. R., 80f:58050**
Vinogradov, M. M. Algebraic de Rham and Spencer cohomology of smooth manifolds. (Russian) **80i:58052**

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Arĭzanyh, I. S. ★Многомерная теория поля. (Russian) [Multidimensional field theory] **(80b:83029)**
Bukhtaber, V. M. (*with* Škurov, A. V.) The Landweber-Novikov algebra and formal

vector fields on the line. (Russian) (80k:55017)

Burgan, J. R. *See* **Gutierrez, J.; et al.,** (80g:82047)

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Fijalkow, E. *See* **Gutierrez, J.; et al.,** (80g:82047)

Fuks, D. B. Cohomology of infinite-dimensional Lie algebras and characteristic classes of foliations. (Russian) (80g:57039)

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Morimoto, Tohru La géométrie des équations de Monge-Ampère. (English summary) (80f:58004)

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Schücker, Thomas Premier groupe de cohomologie, à coefficients dans la représentation adjointe, pour des algèbres de Lie attachées à une paire de variétés. (English summary) (80b:58037)

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Šokurov, A. V. *See* **Bubiŭtaber, V. M.,** (80k:55017)

Thomas, C. B. A classifying space for the contact pseudogroup. (80i:57021)

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58H15 Deformations of structures [See also 32Gxx, 58G05.]

Lichnerowicz, André Déformations de l'algèbre de Lie des automorphismes infinitésimaux d'une structure de contact. (English summary) (80m:58044)

Vinogradov, A. M. The theory of higher infinitesimal symmetries of nonlinear partial differential equations. (Russian) (80m:58045)

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d'Inverno, R. A. (*with* Stachel, John J.) Conformal two-structure as the gravitational degrees of freedom in general relativity. (80b:83018)

Jacobowitz, Howard The Poincaré lemma for $d\omega = F(x, \omega)$. (80m:58003)

Kakié, Kunio Algebraic structures of characteristics in involutive systems of non-linear partial differential equations. (80b:58007)

Kuranishi, Masatake On the equivalence of symbols of nondegenerate CR structure. (80j:32037)

Pommaret, Jean-François Physics and pseudogroups. (80h:58060)

Smrz, P. K. Relativity and deformed Lie groups. (80b:83015)

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Vosylius, R. Categories of spaces with structure equations. (Russian. Lithuanian and English summaries) (80b:58070)

58H99 None of the above, but in this section

Gasqui, Jacques Sur les structures de courbure d'ordre 2 dans $\mathbb{R}^n$. (80h:58061)

Sambors'kiĭ, S. M. General solutions of overdetermined systems of partial differential equations. (Russian) (80h:58062)

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Compiled and Edited by William G. Brown
McGILL UNIVERSITY
DEPARTMENT OF MATHEMATICS

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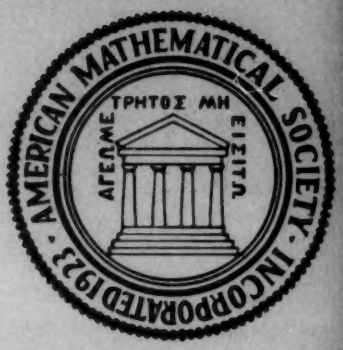

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